

19980406.qrp v01_n052.qrs.980406

Date: Mon, 6 Apr 1998 19:04:13 EDT
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 1052

QRP-L Digest 1052

Topics covered in this issue include:

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by Pierre Constantineau <pierre@cmpe.ubc.ca>
- 2) [7601] New Yeasu FT-847
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- 3) [7602] RS SPKR MICS
by RangerSF5 <RangerSF5@aol.com>
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- 5) [7604] 38S & BCI
by Ed <edn4pk@VoyagerOnline.net>
- 6) [7605] re: terminated folded dipole
by "JUNIUS B FOX" <w5hir@gte.net>
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by Jess Gypin <jessqrp@concentric.net>
- 12) [7611] Spring antenna project
by Mark Kesner <marklori@visuallink.com>
- 13) [7612] My circuits never seem to work for some reason...
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- 14) [7613] QRP plus repair
by "Kelly Ellison" <kelman@dialnet.net>
- 15) [7614] Elmer 101 procedural Question
by Dale Scott <dcscott@us.ibm.com>
- 16) [7615] Re: Elmer 101 procedural Question
by Robert Bayha <rbayha@ix.netcom.com>
- 17) [7616] Re: My circuits never seem to work for some reason...
by mjsilva@ix.netcom.com
- 18) [7617] For Sale- Yaesu FT767GX
by "Charles L. Stackhouse" <cstack@safelink.net>
- 19) [7618] Re: My circuits never seem to work for some reason...

- by mjsilva@ix.netcom.com
- 20) [7619] New K2 Rig Pictures on EleCraft Web site
by "Eric Swartz, WA6HHQ EleCraft" <erics@elecraft.com>
- 21) [7620] B&W Miniductors
by neil <neil@aade.com>
- 22) [7621] Re: mobile inverted L?
by Bruce Hopkins - KL7JAF <kl7jaf@eagle.ptialaska.net>
- 23) [7622] Re: My circuits never seem to work for some reason...
by "S. Lee" <slee@u.washington.edu>
- 24) [7623] Kanga Oner Question
by "Roger A. McCarty" <rmccarty@earthlink.net>
- 25) [7624] Re: Bullet Hole?
by Dick G0BPS <G0BPS@kanga.demon.co.uk>
- 26) [7625] Re: My circuits never seem to work for some reason...
by Leon Heller <leon@lfheller.demon.co.uk>
- 27) [7626] Seeking rig suggestions & other info
by agulseth@juno.com (Al Gulseth)
- 28) [7627] FS/T: 38S kit and wide Norcal paddle kit
by <FaithD@mail01.dnr.state.wi.us>
- 29) [7628] K2 Pictures
by Tim Ahrens <tahrens@inetport.com>
- 30) [7629] Re: Bug Parts....
by Monte Stark <ku7y@dri.edu>
- 31) [7630] RE: FS/T: 38S kit and wide Norcal paddle kit
by <FaithD@mail01.dnr.state.wi.us>
- 32) [7631] Diode rating help
by David Ek <ekdave@earthlink.net>
- 33) [7632] Antennas, non-res
by K5BDZ <K5BDZ@aol.com>
- 34) [7633] Re: B&W folded dipole
by Vic Rosenthal <rakefet@rakefet.com>
- 35) [7634] S. Cal QRP / Society Link???
by "Len W. Tough" <len@infinet.com>
- 36) [7635] Re: Diode rating help
by "S. Lee" <slee@u.washington.edu>
- 37) [7636] Coax as twin lead??
by K5BDZ <K5BDZ@aol.com>
- 38) [7637] Next Sat NW QRP Club Meeting
by Bill Todd <bill@willapabay.org>
- 39) [7638] Re: [CW] Tasmania and others DX's with QRP and QRPp(long?)
by "George T. Baker" <w5yr@swbell.net>
- 40) [7639] Re: My circuits never seem to work for some reason...
by Steven Weber <kd1jv@moose.ncia.net>
- 41) [7640] Re: Bullet Hole?
by "edwin a. crowell" <w5twr@rconnect.com>
- 42) [7641] ARCI Survey
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
- 43) [7642] 10 Meter DX

by Ed Loranger <we6w@qsl.net>
44) [7643] Re: Coax as twin lead??
by "George T. Baker" <w5yr@SWBell.net>
45) [7644] Coax as twinlead -2
by Andris Neimers <VitalVoice@compuserve.com>
46) [7645] update: please help
by Roger Braker <msebrakr@telepath.com>
47) [7646] Elmer 101: getting started
by Michael Maiorana <mikemo@ibm.net>
48) [7647] Re: ARCI Survey
by KC5TJA <kc5tja@topaz.axisinternet.com>
49) [7648] Re: K2 Pictures
by <FaithD@mail01.dnr.state.wi.us>
50) [7649] Hartley oscillator
by Leon Heller <leon@lfheller.demon.co.uk>
51) [7650] Re: My circuits never seem to work for some reason...
by KC5TJA <kc5tja@topaz.axisinternet.com>
52) [7651] QRP ARCI Survey
by Monte Stark <ku7y@dri.edu>
53) [7652] Ten-Tec 1254
by "Marshall Emm" <mgemm@mtechnologies.com>
54) [7653] Re: ARCI Survey
by Monte Stark <ku7y@dri.edu>
55) [7654] Re: Diode Rating Help--tnx
by David Ek <ekdave@earthlink.net>
56) [7655] Re: Hartley oscillator
by KC5TJA <kc5tja@topaz.axisinternet.com>
57) [7656] B&W Folded Dipole; Noise and Efficiency
by "James R. Duffey" <ji3m@maxwell.com>
58) [7657] Re: ARCI Survey
by KC5TJA <kc5tja@topaz.axisinternet.com>
59) [7658] Iowa QRP 1st meeting and other tidbits
by John Burnley <JBurnley@ifmc.org>
60) [7659] Alinco mini-handie talkie mod URL
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
61) [7660] Re: ARCI Survey and QQ
by Monte Stark <ku7y@dri.edu>
62) [7661] Argosy Info needed
by "James C. Owen, III" <owen@piper.eeel.nist.gov>
63) [7662] Re: Coax as twin lead??
by K5BDZ <K5BDZ@aol.com>
64) [7663] Icom IC-765 Power Level Control (long)
by "George T. Baker" <w5yr@swbell.net>
65) [7664] Re: Elmer 101: getting started
by ka7you@juno.com
66) [7665] Re: Elmer 101: getting started
by Michael Maiorana <mikemo@ibm.net>
67) [7666] Re: Coax as twinlead -2

by "George T. Baker" <w5yr@swbell.net>
68) [7667] Hartley oscillator SPICE model
by Leon Heller <leon@lfheller.demon.co.uk>
69) [7668] Elmer 101
by joel malman <malman@world.std.com>
70) [7669] Re: Antennas, non-res
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
71) [7670] Golf Ball Antenna?
by DENNIS MO <DENNISMO@aol.com>
72) [7671] Elmer 101: Kit arrival in CA
by Bob Bayha <rbayha@ix.netcom.com>
73) [7672] Thoughtful Appreciation
by DENNIS MO <DENNISMO@aol.com>
74) [7673] Re: B&W Folded Dipole; Noise and Efficiency
by "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
75) [7674] Elmer101
by Brad Mugleston <bmug@gwl.com>
76) [7675] Not quite QRP but please read
by Brad Mugleston <bmug@gwl.com>
77) [7676] Parallel Dipoles as Multiband Antennas
by "James R. Duffey" <ji3m@maxwell.com>
78) [7677] help
by ac5ez@webtv.net (Larry B)
79) [7678] RF probe success with Micronta 22-195A
by pmk@juno.com (Patrick M Kvitkauskas)
80) [7679] Problem
by "Ron Polityka" <wb3aal@talon.net>
81) [7680] ooops RF probe success with Micronta 22-195A
by pmk@juno.com (Patrick M Kvitkauskas)

Date: Sun, 05 Apr 1998 16:05:40 -0700
From: Pierre Constantineau <pierre@cmpe.ubc.ca>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7600] spice simulation software
Message-ID: <35280E42.D2A46AF0@cmpe.ubc.ca>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi,

I would like to know where to download a simulation software which is easy to use.

One which entering the model is simply drawing the schematic.

Thanks

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-----o000--( _ )--000o-----
Pierre Constantineau  B.Eng      Email: pierre@cmpe.ubc.ca
M. Applied Sciences Candidate    Phone: (604) 822-2913
Flash Smelting Group            Fax:   (604) 822-4750
Centre For Metallurgical        111-2355 East Mall
Process Engineering             Vancouver, BC, Canada
U. of British Columbia .ooo0    V6T 1Z4
http://noname.cmpe.ubc.ca ( _ )  Oooo.  Amateur Radio: VE7JPC
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Date: Sun, 05 Apr 1998 20:07:02 -0400
From: joel malman <malman@world.std.com>
To: qrp-l@Lehigh.EDU
Subject: [7601] New Yeasu FT-847
Message-ID: <199804060007.AA18370@world.std.com>

Folks,

I read (on Usenet) that the 847 does not support full QSK and that it uses a relay for T/R switching. Now, I don't normally believe everything I read on Usenet -- and maybe I should not believe this. But if it is true (a \$2000 rig without full QSK), maybe we should send Mr. Yaesu a Wilderness SST/40 so he can learn how full QSK is done.

Catch you all at the Sprint tomorrow night.. where most of us can hear things between the dits!

72,

/joel wa1qvm (Concord, Mass)

Date: Sun, 5 Apr 1998 20:22:00 EDT
From: RangerSF5 <RangerSF5@aol.com>
To: forsale-swap@qth.net, qrp-1@Lehigh.EDU
Subject: [7602] RS SPKR MICS
Message-ID: <762648c1.3528202b@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Another short note, Here's the way it went
Dave N9UXU
Barry WB6LDL
CONRAD NN6CW
Piero N3FEG.
I'm letting one go to fill in the 4th request
I'll mail them out to the above
Please send your address.
Send me \$4.50 total.
That should cover the mail.
My address is good under the QRZ call look up
Bob
WA2HOQ

Date: Sun, 05 Apr 1998 17:39:29 -0700
From: Vic Rosenthal <rakefet@rakefet.com>
To: Ed Tanton <n4xy@att.net>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7603] Re: B&W folded dipole
Message-ID: <35282441.A6134A6B@rakefet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Ed Tanton wrote:

>
> Hi Vic... I can tell you right now you're going to get an earful... and in
> large part, you're going to be told that the antenna doesn't work well
> because of that lossy resistor/whatever, etc. etc. MOST of the people who
> are going to tell you that do not own one of the B&W antennas.

Very interesting...because what got me looking at the web page and thinking about
the
antenna in the first place is a local guy telling me how much he likes his new B&W
end-fed inverted vee (basically an end-fed version of the dipole). This is a guy
who

used to have a beam (a number of them, as a matter of fact), and I was kind of surprised that he would think well of this antenna (no, it didn't outperform his beams, but he was pleasantly surprised at how well it did work).

Vic, K2VCO
Fresno CA

Date: Sun, 05 Apr 1998 20:52:37 -0400
From: Ed <edn4pk@VoyagerOnline.net>
To: QRP <qrp-1@Lehigh.EDU>
Subject: [7604] 38S & BCI
Message-ID: <35282755.BEC0FE95@VoyagerOnline.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Having just acquired a 38S I realize I am about a year and a half behind the times. Have never seen this mentioned but, is the 38S prone to BCI ?? It is dark here now and during the day the band is just fine, however this evening the BCI just clobbered me. I tried to crank back on the RF gain but all that managed to do was kill all but the strongest signals. Seems somewhere I read that diodes are usually a culprit in a situation such as this ??
BTW 1st CQ netted a VE2, 2nd CQ netted DL2GG/YV5, and the 3rd NOWM. This is a lotta fun...
Ed N4PK ..

Date: Sun, 5 Apr 1998 19:54:28 -0500
From: "JUNIUS B FOX" <w5hir@gte.net>
To: <qrp-1@Lehigh.EDU>
Subject: [7605] re: terminated folded dipole
Message-ID: <01bd60f6\$8d733180\$116afed0@w5hir.gte.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

HI.. well you've got my curiosity up. I went to the web to see what I could find on the subject of terminated folded dipoles.
check out the following: <http://www.at-communications.com/dip.html>

regards,

Foxy

Date: Sun, 05 Apr 1998 20:56:00 -0400
From: jim nestor <nestoji@home.com>
To: qrp-1@Lehigh.EDU
Subject: [7606] mobile inverted L?
Message-ID: <19980406005834.AAA5681@ccc652944-a.ewndsr1.nj.home.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Weird idea number 27.... how about an inverted-l style mobile antenna.

If a 6-8 foot vertical whip is the basic mobile antenna, what would happen if I added another 6-8 foot horizontal extension parallel to the roof of the vehicle?

It seems as if it would be pretty easy to clip some wire onto the top of the vertical whip and stretch it toward the front of the vehicle and attach it with a length of insulated line, say to the BC antenna.

The extra length should make it easier to baseload, and at about 16-17 feet might actually be close to resonance on 20 meters.

During the last sunspot cycle when 10m was hot, i ran 10m mobile using a cut-down CB whip. Because it was too tall to get into my business parking garage, I would stop and bend the whip forward into sort of a "C" shape and tie it down. One day I forgot to untie the whip on the way home and managed to make a bunch of contacts in that weird configuration. makes you wonder...

Has anybody else tried an inverted-l mobile? What kind of polarization and pattern do you think it would produce?

It's cheap and easy enough that I'll probably try it, but wonder if any of the resident wizards have opinions.

72,

Jim, Wk8G/2
nestoji@home.com

Date: Sun, 5 Apr 1998 21:00:20 EDT
From: K5BDZ <K5BDZ@aol.com>
To: w5hir@gte.net, qrp-1@Lehigh.EDU
Subject: [7607] Re: terminated folded dipole
Message-ID: <4a57fc8f.35282926@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

OK Foxy
I give up. What's the real web address?
Thanks
Bill, K5BDZ

Date: Sun, 05 Apr 1998 19:08:56 -0700
From: "William R. (Ray) Colbert" <af852@rgfn.epcc.edu>
To: qrp-1@Lehigh.EDU
Subject: [7608] B&W antenna = T2FD
Message-ID: <35283938.28B5@rgfn.epcc.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Those wanting more information on the B&W folded dipole should read the writeups done by Gil Countryman, W3HH, June 49 QST with additional follow-up articles in CQ in 1953, 1956 and later.

--

"Politicians are like nappies. Both should be changed regularly -- and for the same reason"
Scotsman's Diary - 1997

Ray Colbert, W5XE,
00TC 3618, SOWP 1064M
(also af852@rgfn.epcc.edu)
El Paso, Texas (Far West Texas)

Date: Sun, 05 Apr 1998 19:25:13 -0600
From: "Karl B. Staddon" <ve6kbs@agt.net>

To: malman@world.std.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7609] Re: New Yeasu FT-847
Message-ID: <35282EF9.328A@agt.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Joel, I've got a new FT-847 and can confirm that the 847 does have a relay for so-called qsk. The relay delay time returning to RX can be varied between 10 and 300 ms. The relay is quieter than the original ic 706 as well as the 706mkII, but nevertheless is annoying compared to my FT-990 and FT-890 rigs which have no relays.

The other negative is that the digital passband filter width is continuously variable in SSB, but not on CW where it has to be set by software to 25/100/200 or 400 hz. Think you can also get a filter to take it to 500hz or so passband with the push of a button.

The aforementioned issues are my two beefs with what is otherwise a very nice rig based on my limited experience with it. The sensitivity on 2 metres is stunningly good - best I've ever heard.

Cheers de VE6KBS, KARL, CALGARY, AB

joel malman wrote:

>
> Folks,
>
> I read (on Usenet) that the 847 does not support full QSK and that it uses
> a relay for T/R switching. Now, I don't normally believe everything I read
> on Usenet -- and maybe I should not believe this. But if it is true (a \$2000
> rig without full QSK), maybe we should send Mr. Yaesu a Wilderness SST/40
> so he can learn how full QSK is done.
>
> Catch you all at the Sprint tomorrow night.. where most of us can hear things
> between the dits!
>
> 72,
>
> /joel wa1qvm (Concord, Mass)

Date: Sun, 05 Apr 1998 20:21:53 -0600
From: Jess Gypin <jessqrp@concentric.net>
To: nestoji@home.com, qrp-1@Lehigh.EDU

Subject: [7610] Re: mobile inverted L?
Message-ID: <35283C41.9429CC94@concentric.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Not quite the same idea, just reminded me of something that I saw that was kinda similar. Take a look at the following URL
<http://home.att.net/~JETAYL/mobarticle.html>
You might find it interesting!

jim nestor wrote:

> Weird idea number 27.... how about an inverted-l style mobile antenna.
>
> If a 6-8 foot vertical whip is the basic mobile antenna, what would happen
> if I added another 6-8 foot horizontal extension parallel to the roof of
> the vehicle?
>
> It seems as if it would be pretty easy to clip some wire onto the top of
> the vertical whip and stretch it toward the front of the vehicle and attach
> it with a length of insulated line, say to the BC antenna.
>
> The extra length should make it easier to baseload, and at about 16-17
> feet might actually be close to resonance on 20 meters.
>
> During the last sunspot cycle when 10m was hot, i ran 10m mobile using a
> cut-down CB whip. Because it was too tall to get into my business parking
> garage, I would stop and bend the whip forward into sort of a "C" shape and
> tie it down. One day I forgot to untie the whip on the way home and managed
> to make a bunch of contacts in that weird configuration. makes you wonder...
>
> Has anybody else tried an inverted-l mobile? What kind of polarization and
> pattern do you think it would produce?
>
> It's cheap and easy enough that I'll probably try it, but wonder if any of
> the resident wizards have opinions.
>
> 72,
>
> Jim, Wk8G/2
> nestoji@home.com

--

Jess N0TFI <><
<http://www.concentric.net/~jessqrp> Personal Home page

<http://qsl.net/N0TFI/bug.html> Bug Stories

Date: Sun, 05 Apr 1998 21:49:06
From: Mark Kesner <marklori@visuallink.com>
To: qrp-l@Lehigh.EDU
Subject: [7611] Spring antenna project
Message-ID: <3.0.5.16.19980405214906.35c71144@visuallink.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I have been contemplating a phased vertical array for 40 meters. I would like to be able to make it at least bi-directional and at minimal cost. I have seen a couple of articles on this but would like to invite the suggestions of the group as to phasing techniques, construction techniques, radials, etc.

I had been thinking of using antenna mast sections for the vertical and have had construction cloth suggested as an effective ground plane. Thanks in advance for your help and hope to have a killer sig on 40 soon. (The better to play with my forthcoming Elmer101 SW40+)

Mark
KC4GIA

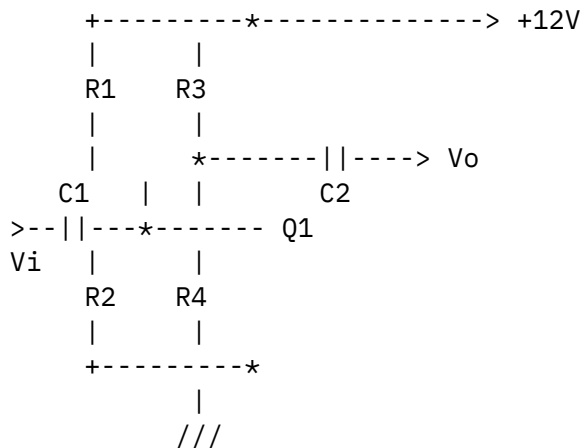
Date: Sun, 5 Apr 1998 19:47:26 -0700 (PDT)
From: KC5TJA <kc5tja@topaz.axisinternet.com>
To: qrp-l@Lehigh.EDU
Subject: [7612] My circuits never seem to work for some reason...
Message-ID: <Pine.LNX.3.96.980405192305.5539A-1000000@topaz.axisinternet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I still cannot figure it out.

I devise a single stage amplifier, for testing purposes, like so:

R1 = 18K
R2 = 2K
R3 = 10K
R4 = 1K

Q1 = 2N3904 (or whatever the NPN version of the transistor is)
 C1 = 0.01uF
 C2 = 0.01uF



Seems innocent enough. The math clearly indicates it should have a gain of 10. Yet, when I place my finger on Vi, I seem to get a gain of 5, as visually computed by observing the oscilloscope output. The "signal" in happened to be 60Hz with tons of noise (as expected by the application of a human finger to a terminal).

When I used my 7MHz signal source that I created a while back (VFO/1 for those who remember), I get a gain of 2 at most, and it SEVERELY distorts the oscillator's output. I know that it cannot be impedance mismatch here, because I drove a 470 ohm resistor with my VFO once, just to check to see if it was loading the VFO, and it did not affect the waveform one bit.

Can anyone tell me why this is happening? I'm at a complete loss, and quite literally, at the END of my rope when it comes to trying new things to try. I'm literally about to just give up.

The circuit is being built dead-bug style, with a solid copper ground plane. Average component height is about 0.5 inches from the board. All component leads are as short as possible while still permitting me to be able to solder the components. (If I had a camera, I'd show you).

Some of the observations I've made include the following (for each point, power was disconnected):

- 1) When I place my finger on the Vo terminal, and monitor the voltage on the collector, I get a rectified AC waveform. My knowledge of transistor theory states that this should not be, as the transistor should be turned off (thus, the collector should be a much higher impedance than the load resistor).

2) When I place my finger on the emitter terminal of the transistor, I get a VERY small waveform on the base. VERY small. This could be due to capacitance between the emitter and base.

3) When testing the transistor, the transistor checked out to be good. This was to be expected, as it was a brand new transistor.

Any ideas? How is it that, without fail, every circuit I build, whether it is from a book or otherwise, fails miserably? I'm starting to think that my VFO is a complete FLUKE in that it is, currently, the only thing I made that worked as expected and reliably (though its output is a triangle wave, instead of a sine wave :-)).

What is it that I am missing? Am I not to have a solid copper ground plane when dealing with RF circuit paths? Heck, even AF had some problems. Has anyone ever encountered this problem? My VFO is built free-form; it is not mounted on any ground-plane, and it works. I'm totally confused.

If this continues, I will forever be limited to the domain of digital electronics, which is not what I want to do.

Thanks for the input. It is greatly appreciated.

```
=====
      KC5TJA/6      |      -| TEAM DOLPHIN |-
      DM13         |      Samuel A. Falvo II
      QRP-L #1447  |      Chief Architect and Project Founder
=====
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Date: Sun, 5 Apr 1998 22:29:59 -0500
From: "Kelly Ellison" <kelman@dialnet.net>
To: <qrp-l@Lehigh.EDU>
Subject: [7613] QRP plus repair
Message-ID: <199804060327.WAA10016@mail.dialnet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hello all,

Is there anywhere to get parts for the Index Labs QRP Plus or any where a person could get one serviced if needed? Thinking about getting one.... is this a mistake? Please E-mail

direct at kelman@dialnet.net

Kelly Ellison
WBOWQS
QRP-L #702

Date: Sun, 5 Apr 1998 23:57:00 -0400
From: Dale Scott <dcscott@us.ibm.com>
To: <qrp-l@Lehigh.EDU>
Subject: [7614] Elmer 101 procedural Question
Message-ID: <50301000192656820000002L022*@MHS>
MIME-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Transfer-Encoding: quoted-printable

Many of us will be receiving our SW 40+ kits any day now and will be understandably anxious to start flowing the solder. As "students" are = we to put these together in their entirety or are we supposed to go slow and = put them together one module at a time so we can discuss this as a group. If we= are supposed to go slow you'd best tell us or there might be one or two "im= patient" folks in the crowd (I know at least one) who will put the whole darn th= ing together the first night.

73 - dale/w7hlo

Dale C. Scott
IBM -- Engineering Technology Solutions
(206) 587-2784 8/277-2784

Internet: (work) dcscott@us.ibm.com
(home) dcscott@ibm.net
OV/VM: dcscott@ibmusm54
=

Date: Sun, 05 Apr 1998 21:06:27 -0700
From: Robert Bayha <rbayha@ix.netcom.com>

To: dcscott@us.ibm.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7615] Re: Elmer 101 procedural Question
Message-ID: <352854C3.5A4DE583@ix.netcom.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Good question, Dale. I'm curious as to the expected general flow of things during the class, also.

--

Bob Bayha, K6RKB
QRP-L #1209, QRP-ARCI #9505
CQC #488 G-QRP #9884, NorCal #2394

Date: Sun, 5 Apr 1998 23:25:24 -0500 (CDT)
From: mjsilva@ix.netcom.com
To: kc5tja@topaz.axisinternet.com
Subject: [7616] Re: My circuits never seem to work for some reason...
Message-ID: <199845212514141@ix.netcom.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

>R1 = 18K
>R2 = 2K
>R3 = 10K
>R4 = 1K
>Q1 = 2N3904 (or whatever the NPN version of the transistor is)
>C1 = 0.01uF
>C2 = 0.01uF

>
> +-----*-----> +12V
> | |
> R1 R3
> | |
> | *-----|-----> Vo
> C1 | C2
>>--||---*----- Q1
>Vi | |
> R2 R4
> | |
> +-----*
> |
> ///

>
>Seems innocent enough. The math clearly indicates it should have a gain
>of 10. Yet, when I place my finger on Vi, I seem to get a gain of 5, as
>visually computed by observing the oscilloscope output. The "signal" in
>happened to be 60Hz with tons of noise (as expected by the application
>of a human finger to a terminal).
>
>When I used my 7MHz signal source that I created a while back (VFO/1 for
>those who remember), I get a gain of 2 at most, and it SEVERELY distorts
>the oscillator's output. I know that it cannot be impedance mismatch
>here, because I drove a 470 ohm resistor with my VFO once, just to check
>to see if it was loading the VFO, and it did not affect the waveform one
>bit.

My guess is that you're running the base bias too low. You've got 1.2 volts on the base, and after a 0.7 volt BE drop you've only got 0.5 volts across the emitter resistor. You don't say what the magnitudes of your input signals were, but it wouldn't take a very large signal to drive the transistor into cutoff, and an even smaller one will drive it into such a low current region that the assumptions you made in your calculations (namely that the emitter voltage will follow the base voltage with a fixed offset) will fail. Try biasing the base up to 3 or 4 volts by increasing R2 and see if it works better.

73,
Mike, KK6GM

Date: Sun, 5 Apr 1998 22:41:44 -0600
From: "Charles L. Stackhouse" <cstack@safelink.net>
To: <qrp-1@Lehigh.EDU>
Subject: [7617] For Sale- Yaesu FT767GX
Message-ID: <19980406044954098.AAA192@safelink.safelink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

An inactive ham friend has joined the Air Force and asked me to sell his stuff.

For Sale

Yaesu FT767GX HF transceiver in excellent working condition per the owner. I did fire it up for a few QSO's and it works fine but I didn't do an

exhaustive checkout. There are a few scratches on cabinet. It has built-in automatic antenna tuner, power supply, iambic keyer, 600 Hz CW crystal filter, audio peak filter, digital SWR meter, digital RF wattmeter, and IF shift. Best of all, it can be turned down to ONE WATT. Includes MD-1 desk microphone, YS-60 SWR/PWR meter, Nye straight key on metal base, and manual. Asking \$950 or best offer.

Universal M-8000 Communications terminal. Decodes Morse, Baudot, ASCII, Packet, PACTOR, FAX, etc, etc, etc. I know nothing about this but the owner says it works well and is a great buy at \$1000.

Please email me directly or call if you are interested. I can put you in touch with the owner if you have any questions.

73, Charlie WA2IOZ QRP-L 362
Burley, Idaho 208-678-8683

Date: Sun, 5 Apr 1998 23:49:10 -0500 (CDT)
From: mjsilva@ix.netcom.com
To: qrp-l@Lehigh.EDU
Subject: [7618] Re: My circuits never seem to work for some reason...
Message-ID: <199845214853115724@ix.netcom.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

>My guess is that you're running the base bias too low. You've got 1.2
>volts on the base, and after a 0.7 volt BE drop you've only got 0.5 volts
>across the emitter resistor. You don't say what the magnitudes of your
>input signals were, but it wouldn't take a very large signal to drive the
>transistor into cutoff, and an even smaller one will drive it into such a
>low current region that the assumptions you made in your calculations
>(namely that the emitter voltage will follow the base voltage with a
>fixed offset) will fail. Try biasing the base up to 3 or 4 volts by
>increasing R2 and see if it works better.

Well, I was doing OK until that last sentence! Of course you can't bias up to 3 or 4 volts because then you'd need to drop 23 to 33 volts across the collector resistor, which is a lot more than the 12 you've got to work with. Your tradeoff is higher bias and smaller collector resistor in order to handle large inputs, or keep the circuit as is but keep the input signal level low. By bypassing some or all of the emitter resistor you can give yourself more design leeway since the AC and DC emitter impedances need no longer be the same.

73,
Mike, KK6GM

Date: Sun, 05 Apr 1998 23:10:57 -0700
From: "Eric Swartz, WA6HHQ EleCraft" <erics@elecraft.com>
To: QRP-L <qrp-l@Lehigh.EDU>
Cc: N6KR <n6kr@elecraft.com>
Subject: [7619] New K2 Rig Pictures on EleCraft Web site
Message-ID: <352871F0.92D4434@elecraft.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Pictures of the K2 rig demo at today's NorCal QRP meeting are available
on the EleCraft web site: <http://www.elecraft.com>

Click on the 'News' section at the top for the pictures.

72, Eric WA6HHQ

Date: Sun, 05 Apr 1998 23:21:10 -0700
From: neil <neil@aade.com>
To: qrp-l@Lehigh.EDU
Subject: [7620] B&W Miniductors
Message-ID: <35287456.7AD9@aade.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Seems I've seen several posts people wanting B&W Miniductors and
Airductors, The air wound coils. Turns out they are still in
business.

<http://www.bwantennas.com/index.htm>

--
Neil

<http://www.aade.com>
<mailto:neil@aade.com>
Almost All Digital Electronics
1412 Elm St. SE
Auburn, WA 98092
253-351-9316

Date: Sun, 5 Apr 1998 22:37:29 -0900
From: Bruce Hopkins - KL7JAF <kl7jaf@eagle.ptialaska.net>
To: nestoji@home.com
Cc: qrp-l@Lehigh.EDU
Subject: [7621] Re: mobile inverted L?
Message-ID: <[v03007800b14e31464c71@\[204.119.15.4\]](mailto:v03007800b14e31464c71@[204.119.15.4])>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Jim...

Weird mobile antennas ???

Never tried the Inverted-L configuration but have used an Inverted-V... During the height of the last sunspot cycle, I mounted a two inch wooden pole just behind the middle of the cab of my International Harvester stakebed... I mounted a full sized 10m inverted-v running fore and aft... Worked like a champ, somewhat directional, but a real eye catcher... Its 12 ft. apex was ok until the day I drove thru the McDonalds drive-thru and forgot about the overhang... I had a special QSL card that I sent out for those mobile contacts... It had a picture of that "Corn Binder" with the inverted-v and a pennant flying from the top of the pole...

Remember what Red Green says, " Any tool is the right tool" !!! Give it a try, it might just work great... Take care and have fun...

72 / 73 / oo's - Bruce - KL7JAF

"Alaska QRP Club" - Web Site: <http://www2.polarnet.com/~bhopskins/akqrp>

Date: Mon, 6 Apr 1998 00:31:16 -0700 (PDT)
From: "S. Lee" <slee@u.washington.edu>
To: KC5TJA <kc5tja@topaz.axisinternet.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7622] Re: My circuits never seem to work for some reason...
Message-ID: <Pine.A41.3.95b.980405230402.30510A-100000@homer31.u.washington.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

In the AC analysis it helps to know a few things about the VFO/1 circuit, such as the $r_{(sub)o}$, (output resistance) and its current. OK, making an assumption of 1 uAmp of current and 10 KOhms output resistance let's determine the R of the CE stage you have shown.
 $R = R1 || R2 || r_{(sub)o} = 18K || 2K || 10K = 1525 \text{ Ohms}$

$R_{(sub)I}$ is the resistance reflected back into the base from the emitter resistor. $R_{(sub)I} = \text{Beta} \times R_E = 100 \times 1K = 100K \text{ Ohms}$. I've made another assumption here in that the Beta of your xsistor is 100 and also that the bulk resistance of the base junction is negligible when compared to 100K Ohms.

So the input part of the equivalent circuit consists of the current generator from VFO/1 then R in parallel with $R_{(sub)I}$. We're trying to divvy up 1 uAmp of current between a resistance of 1525 Ohms and a resistance of 100K Ohms. Current follows the path of least resistance so try to visualize how much current is flowing through the 1525 Ohms versus that 100K Ohms. Ideally we want the opposite of what you are seeing here in that it is much desired to have R be a high value and $R_{(sub)I}$ be a much much lower value. The current that flows through $R_{(sub)I}$ is the current that is driving the transistor's base, $i_{(sub)b}$.

Calculating for the $i_{(sub)b} = ((1 \text{ uAmp}) \times R) / (R + R_{(sub)I})$
 $= (1E-6 \times 1525) / (1525 + 100E3) = 1.525E-3 / 101525 = 15 \text{ nano Amps}$

OK, multiply $i_{(sub)b}$ by Beta to solve for the collector current;
 $100 \times 15E-9 = 1.5E-6$ The gain equation, $A_{(sub)I} = i_{(sub)c} / i_{(sub)b}$
 $= 1.5E-6 / 1.0E-6 = 1.5$

So you see, you ARE getting less than a gain of 2 (using a few assumptions).

Try putting a 20 KOhm pot in series with R1, 10 KOhm pot in series with R2. Change R4 to 100 Ohms then put a 1 KOhm pot in series with R4. Add a 100 uF capacitor across the emitter and ground. Using your VFO/1 signal at the xsistor's input tweak the pots and observe the output with your scope. Note how the 100 uF capacitor changes the output...it effectively nullifies $R_{(sub)I}$ in the equations above, resulting in more gain.

The distortion you are experiencing is most likely due to incorrect DC biasing of the base. Tweak the pots until your signal looks better. The VF0/1 can most likely overdrive the base of a 2N3904 by a factor of 10 or more with the only distortion being clipping of the peaks. But do check the current out and output resistance of your VF0/1.

OK, I'm open to rebuttal now :)
de AB7HI, Stephen Lee, Federal Way, WA
slee@u.washington.edu

Date: Mon, 6 Apr 1998 00:43:20 -0700
From: "Roger A. McCarty" <rmccarty@earthlink.net>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [7623] Kanga Oner Question
Message-ID: <01bd612f\$abb401e0\$9aa9d9cf@accurate-1>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Anyone have personal experience with the Oner transceiver? I have built 2, one for 80 and one for 40 meters. The 80 meter unit seems to be working fine thus far, using lab equipment for the vfo and rf input. The 40 meter unit is deaf. The included documentation says, "try 33 turns (on the coil) for 40 meters. I wonder if anyone has built the 40 meter version with success and could pass on to me what they used for the number of windings on the coil. Using 33 turns I found I had to add 68pf of capacitance in parallel with the trimmer cap to obtain a peak at 7 Mhz., but I am not sure I am truly resonant. I don't mind removing the coil and winding it again, but I'd like to have a known parameter to begin with :-}

73/72 es Zut

Roger KD6CC

Date: Sun, 5 Apr 1998 16:35:54 +0100
From: Dick G0BPS <G0BPS@kanga.demon.co.uk>

To: n0tu@webaccess.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7624] Re: Bullet Hole?
Message-ID: <b5rLgGAaT6J1Ew1X@kanga.demon.co.uk>
MIME-Version: 1.0

In message <003a01bd6096\$adb4a560\$36a8a3cc@SG2939M.webaccess.net>, Steve Galchutt <n0tu@webaccess.net> writes
>Hey Paul ,
>Your "Data Book for Homebrewers and Qrppers" was laying on my bench when
>notice the bullet hole in the meter face on the Simpson VOM (back cover
>photo). Was the meter in error or something?
>72...Steve

Obviously something about the meter upset him,
Perhaps it wasn't accurate anymore

Or perhaps he drank too much and was 'shot away' !!

8-)

TTFN de ..

--

Dick Pascoe G0BPS
Kanga Products
Seaview House, Crete Road East
Folkestone CT18 7EG U.K.
Tel 44 (0) 1303 891106
<http://www.kanga.demon.co.uk>

Date: Mon, 6 Apr 1998 14:20:25 +0100
From: Leon Heller <leon@lfheller.demon.co.uk>
To: kc5tja@topaz.axisinternet.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7625] Re: My circuits never seem to work for some reason...
Message-ID: <Ie9qABAZaNK1EwtR@lfheller.demon.co.uk>
MIME-Version: 1.0

In message <Pine.LNX.3.96.980405192305.5539A-1000000@topaz.axisinternet.com>, KC5TJA <kc5tja@topaz.axisinternet.com> writes
>I still cannot figure it out.
>
>I devise a single stage amplifier, for testing purposes, like so:
>

```

>
>R1 = 18K
>R2 = 2K
>R3 = 10K
>R4 = 1K
>Q1 = 2N3904 (or whatever the NPN version of the transistor is)
>C1 = 0.01uF
>C2 = 0.01uF
>
>      +-----*-----> +12V
>      |         |
>      R1        R3
>      |         |
>      |         *-----||-----> Vo
>  C1  |         |      C2
>>--||---*----- Q1
>Vi    |         |
>      R2        R4
>      |         |
>      +-----*
>              |
>              ///

```

I checked the DC conditions, and they are about right. Your problem is that you haven't bypassed R4, and you are getting so much -ve feedback that you have virtually no gain. I was going to build the circuit for myself, to check that I was on the right lines, but decided to try modelling it with SPICE. Sure enough, without a capacitor across R4, there was no gain. With a .1 uF bypass cap., the gain was about 9. I didn't have a 2N3904 model, so I used the generic small transistor model, with beta = 100.

I used an input signal of 1 mV, swept from 1 MHz to 10 MHz. The source resistance was set to 1 K, as was the load.

The analysis confirms that the DC conditions aren't too far out, with the collector voltage (node 3) at 7.6 V. One usually tries to get it at 1/2 the supply voltage, for minimum distortion with large signals.

I used full Berkeley SPICE, which is available from the Simtel archive (look for DSPICE). The educational version of PSPICE can also be found there. It's easier to use, but is limited to a fairly small number of nodes. A book on SPICE is essential, it's a large, complex program with **lots** of options and tricks of the trade. I use Computer-Aided Circuit Analysis using SPICE, by Walter Banzhaf, published by Prentice-Hall.

Using simulation tools like SPICE can save a lot of time, and is **very** educational. It only takes a few minutes to change a component value, and you

can see the effect straight away. It won't design your circuits for you, but will help you to get them working first time. Of course, I don't practise what I preach, this is the first time I've used it seriously.

73, Leon

1*****04/06/98 ***** spice 2g.6 3/15/83 *****12:35:54*****

0amp.cir - simple single transistor amplifier

0**** input listing temperature = 27.000 deg c

0*****

.ac lin 50 1meg 10meg

vcc 4 0 12
r1 1 4 18k
r2 1 0 2k
r3 3 4 10k
r4 2 0 1k
rload 6 0 1k
c1 5 1 0.01u
c2 3 6 0.01u
c3 2 0 .1u
vgen 7 0 ac 1mv
rgen 7 5 1k

q1 3 1 2 smallsig
.model smallsig npn(bf=100)
.width out = 80
.options limpts = 1000
.plot ac vm(6,0)
.end

1*****04/06/98 ***** spice 2g.6 3/15/83 *****12:35:54*****

0amp.cir - simple single transistor amplifier

0**** bjt model parameters temperature = 27.000 deg c

0*****

```

smallsig
0type      npn
0is        1.00E-16
0bf        100.000
0nf        1.000
0br        1.000
0nr        1.000
1*****04/06/98 ***** spice 2g.6    3/15/83 *****12:35:54*****

0amp.cir - simple single transistor amplifier

0****      small signal bias solution      temperature = 27.000 deg c

0*****

node  voltage  node  voltage  node  voltage  node  voltage

( 1)   1.1922  ( 2)   .4395   ( 3)   7.6487   ( 4)  12.0000

( 5)   .0000   ( 6)   .0000   ( 7)   .0000

voltage source currents

name      current

vcc       -1.036E-03

vgen      0.000E+00

total power dissipation 1.24E-02 watts
1*****04/06/98 ***** spice 2g.6    3/15/83 *****12:35:54*****

0amp.cir - simple single transistor amplifier

0****      operating point information      temperature = 27.000 deg c

0*****

0

```

0**** bipolar junction transistors

0 q1
0model smallsig
 ib 4.35E-06
 ic 4.35E-04
 vbe .753
 vbc -6.457
 vce 7.209
 betadc 100.000
 gm 1.68E-02
 rpi 5.94E+03
 rx 0.00E+00
 ro 1.00E+12
 cpi 0.00E+00
 cmu 0.00E+00
 cbx 0.00E+00
 ccs 0.00E+00
 betaac 100.000
 ft 2.68E+17

1*****04/06/98 ***** spice 2g.6 3/15/83 *****12:35:54*****

0amp.cir - simple single transistor amplifier

0**** ac analysis temperature = 27.000 deg c

0*****

x
 freq vm(6)
 1.000E-04 1.000E-03 1.000E-02 1.000E-01
1.000E+00
 - - - - -
-
 1.000E+06 8.869E-03 . . *. .

 1.184E+06 8.870E-03 . . *. .

 1.367E+06 8.871E-03 . . *. .

 1.551E+06 8.871E-03 . . *. .

 1.735E+06 8.871E-03 . . *. .

 1.918E+06 8.872E-03 . . *. .

.					
2.102E+06	8.872E-03	.	*	.	.
.					
2.286E+06	8.872E-03	.	*	.	.
.					
2.469E+06	8.872E-03	.	*	.	.
.					
2.653E+06	8.872E-03	.	*	.	.
.					
2.837E+06	8.872E-03	.	*	.	.
.					
3.020E+06	8.872E-03	.	*	.	.
.					
3.204E+06	8.872E-03	.	*	.	.
.					
3.388E+06	8.872E-03	.	*	.	.
.					
3.571E+06	8.872E-03	.	*	.	.
.					
3.755E+06	8.872E-03	.	*	.	.
.					
3.939E+06	8.872E-03	.	*	.	.
.					
4.122E+06	8.872E-03	.	*	.	.
.					
4.306E+06	8.872E-03	.	*	.	.
.					
4.490E+06	8.872E-03	.	*	.	.
.					
4.673E+06	8.872E-03	.	*	.	.
.					
4.857E+06	8.872E-03	.	*	.	.
.					
5.041E+06	8.872E-03	.	*	.	.
.					
5.224E+06	8.872E-03	.	*	.	.
.					
5.408E+06	8.872E-03	.	*	.	.
.					
5.592E+06	8.872E-03	.	*	.	.
.					
5.776E+06	8.872E-03	.	*	.	.
.					
5.959E+06	8.872E-03	.	*	.	.
.					
6.143E+06	8.872E-03	.	*	.	.
.					
6.327E+06	8.872E-03	.	*	.	.

0 total job time .02

--

Leon Heller: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See <http://www.lfheller.demon.co.uk/dds.htm> for details of my AD9850
DDS system. See " /diy_dsp.htm for a simple DIY DSP ADSP-2104 system.

Date: Mon, 06 Apr 1998 10:07:59 EDT
From: agulseth@juno.com (Al Gulseth)
To: qrp-l@Lehigh.EDU
Subject: [7626] Seeking rig suggestions & other info
Message-ID: <19980406.090653.7863.0.agulseth@juno.com>

Greetings QRPers,

First, forgive me -- I am not a "dyed-in-the-wool" QRP'er but do enjoy low power operation on occasion.

Questions:

#1. I am in process of considering a rig change -- current box is a TT Omni-D series A. Here's my operating style and what I have come up with; comments?

While I do enjoy QRP (5W or less), I also need QRO (50-100W) as I maintain fone skeds with friends & family members on 160-20M. Good rcvr performance is a must due to QRM & QRN (even the old Omni comes up a bit short at times). I also previously owned a TT Argosy -- but no 160 or WARC & would have liked more XTAL filter flexibility. I work more fone than CW at this point and am not into DX or contesting. Rigs I have been considering include TT Argonaut II & Argo/Scout, Index QRP+, Elecraft, and SGC2020. I would also like to be able to battery power once in a while on QRP. Can all this be done with one rig, or am I dreaming?

#2. If I go the straight QRP rig route I would need a small linear amp (say up to about 50W out) to overcome QRM & QRN on 160-20M. Several years ago there was an article in QST(?) on RF amps using the IRF series HEXFETS. From what I remember these devices seemed to have some potential for low cost HF amps. Anyone done anything further along those lines or have other suggestions for cheap (preferably solid state) amplifiers on the lower bands?

Thanks in advance for your helpful comments.

TNX/73,

Al WB5JNC

e-mail agulseth@juno.com

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Mon, 6 Apr 1998 08:08:47 -0500
From: <FaithD@mail01.dnr.state.wi.us>
To: <qrp-1@Lehigh.EDU>
Subject: [7627] FS/T: 38S kit and wide Norcal paddle kit
Message-ID: <c=US%a=_%p=State-of-Wiscons%l=MAIL04-980406130847Z-58087@mail01.dnr.state.wi.us>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

I have an unbuilt 38Special kit and an unbuilt wide paddle spacing Norcal paddle kit that I am interested in selling. (I have a 38S, I am planning to get one of the 44 Mag's, I have one of the wider paddles already built and a narrow paddle kit on order).

I would like to get \$32 for the 38S kit (incl. shipping) and \$40 for the paddle kit (incl. shipping). I will entertain a trade of working amateur equipment or unbuilt kits. Preference will be given to an individual wanting both (\$70 ppd for both) though I reserve the right to be arbitrary and capricious in selecting from multiple names.

Please contact me direct via e-mail if you are interested in the above.

Tnx, 73 (es 72) de N9WR, Don C. Faith III

Date: Mon, 06 Apr 1998 09:29:32 -0500
From: Tim Ahrens <tahrens@inetport.com>
To: qrp-1@Lehigh.EDU
Subject: [7628] K2 Pictures
Message-ID: <3528E6CC.9CE5B5EB@inetport.com>

MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hey Bob, didja tell Ole Kenny about your 'play time'?
and who is that guy in the red... Santa Claus?

Look out SGC, the boys got hardware!!

(btw, looks really nice too)!

cuall

Tim W5FN

Date: Mon, 6 Apr 1998 07:42:06 -0700 (PDT)
From: Monte Stark <ku7y@dri.edu>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [7629] Re: Bug Parts....
Message-ID: <Pine.SOL.3.96.980406073933.7771B-100000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi folks,

Please state which bug parts you are interested in. Just
being "interested" doesn't let him know which parts he
needs to make how many of!! :-)

Thanks.

And if anyone knows of another list that might like knowing
about this, feel free to get numbers from there too.

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Mon, 6 Apr 1998 09:49:45 -0500

From: <FaithD@mail01.dnr.state.wi.us>
To: <Saad.Mahaini@MCI.Com>
Cc: <qrp-1@Lehigh.EDU>
Subject: [7630] RE: FS/T: 38S kit and wide Norcal paddle kit
Message-ID: <c=US%a=_%p=State-of-Wiscons%l=MAIL04-980406144945Z-58256@mail01.dnr.state.wi.us>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

The Norcal paddle when it originally came out had fairly wide spaced paddles. Since most people are used to narrower spaced paddles, they revised the design to reduce the spacing between the two paddles (by about 1/2" - 3/4").

The 44 Mag. is planned as a 30m kit that will cost abt \$45 - \$50 and will be an improved version of the 38 Special. This will be available through HB electronics:

http://users.ids.net/~hb_elec/

DCF3

>-----

>From: Saad Mahaini[SMTP:Saad.Mahaini@MCI.Com]
>Sent: Monday, April 06, 1998 8:20 AM
>To: Faith III, Don C
>Subject: Re: FS/T: 38S kit and wide Norcal paddle kit
>
>I bought a key kit from NorCal, but no one told me about wide and narrow
>options. I still have not build it, and I don't know what I have!
>Can you please fill me in on this issue. Also, what's a 44 Mags?
>73s Saad KB6VIR/5 Dallas
>
>
>Date: Mon, 06 Apr 1998 08:08 -0500 (CDT)
>From: <FaithD@mail01.dnr.state.wi.us>
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Reply-To: FaithD@mail01.dnr.state.wi.us
>Sender: owner-qrp-1@Lehigh.EDU
>Subject: FS/T: 38S kit and wide Norcal paddle kit
>
>I have an unbuilt 38Special kit and an unbuilt wide paddle spacing
>Norcal paddle kit
>that I am interested in selling. (I have a 38S, I am planning to get
>one of the 44 Mag's, I have one of the wider paddles already built and
>a narrow paddle kit on order).

>
>I would like to get \$32 for the 38S kit (incl. shipping) and \$40 for the
>paddle kit (incl. shipping). I will entertain a trade of working
>amateur equipment or unbuilt kits. Preference will be given to an
>individual wanting both (\$70 ppd for both) though I reserve the right to
>be arbitrary and capricious in selecting from multiple names.
>
>Please contact me direct via e-mail if you are interested in the above.
>
>Tnx, 73 (es 72) de N9WR, Don C. Faith III
>
>

Date: Mon, 6 Apr 1998 08:57:07 -0600
From: David Ek <ekdave@earthlink.net>
To: "'qrp-1@lehigh.edu'" <qrp-1@Lehigh.EDU>
Subject: [7631] Diode rating help
Message-ID: <01BD6139.FB3497C0.ekdave@earthlink.net>

Gang,

My main station power supply died yesterday afternoon, and I traced the failure to a diode across the output (presumably to provide some reverse voltage protection). At any rate, the diode failed and shorted the output. When I cut it out the supply began providing the proper voltage again.

I need to replace the diode, but don't know its ratings. It has the part number "BZW03C15" on it, and it's a small gray spherical component with axial leads. The power supply it belongs to is rated at 13.6V DC, 15A continuous, 20A peak.

Can any of you tell me what this thing is rated, or suggest a replacement part for it? Otherwise I'm reduced to looking for an identical replacement part, which may or may not be found here in town.

Tnx es 72/73
de Dave AB0GO

Date: Mon, 6 Apr 1998 10:52:12 EDT
From: K5BDZ <K5BDZ@aol.com>
To: K5BDZ@aol.com, qrp-1@Lehigh.EDU

Subject: [7632] Antennas, non-res
Message-ID: <bc6e58c.3528ec1e@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Since antennas seem to be the weekly subject, I'll once again comment on one antenna that worked like a "hose full-on" for me in Houston, TX. It is a non-resonate dipole (inverted V) that I originally built during conversations with John, WB5IIR (now deceased) about 15 years ago. The antenna specifics were as follows:

96 feet, off center fed 1/3 distance from one end. Fed with 35' of 450 open ladderline to building feed thru insulators and then 10 feet of double RG62 (92ohm coax, together adding impedences to make shielded 180 ohm coax.) to Johnson 275 watt matchbox. Note: RG62 was connected by connecting each center conductor to respective 450 ladderline wire, with RG62 shield soldered together at each end of coax, and shield grounded ONLY at bottom end where connected to matchbox. Apex of antenna was 30' with short leg running 120 degrees (from due north) down to about 15' height and long leg running about 15 degrees down to 25' height. Dog leg special to say the least! That's right for those of you who can figure...India was NOT in the favored direction of the antenna the way it was hanging!

Did it work? Well, on it, I heard an India station calling CQ on 20 meters (My 3rd in 40 years) called him once and worked him with 5x9 SSB for over 30 minutes. Power? 80 watts Input. Also, I consistantly had one of the strongest signals (and I was barefoot) within 700 mile radius, and good sigs throughout US & Canada on 80 and 40. Aantenna worked 80 thru 10 meters very well including all WARC bands.

Well, you've got it. I miss talking antennas with John, but I have build many various lengths of NON resonate antennas over the years, and all worked. Now go build your own version and don't worry where you hang it as long as it is safe for all concerned.

Bill, K5BDZ

Date: Mon, 06 Apr 1998 07:59:29 -0700
From: Vic Rosenthal <rakefet@rakefet.com>
To: "Wilford D. Lindsey" <70511.3041@compuserve.com>, Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7633] Re: B&W folded dipole
Message-ID: <3528EDD1.2F957595@rakefet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Wilford D. Lindsey wrote:

>

> Does B&W have a web page? Now I am pumped up about their offerings.

Yes,

<http://www.bwantennas.com/index.htm>

Remember though, that no 'trick' dipole can be better than a full-size resonant dipole at the same height. The extra bandwidth and no-tune convenience of the B&W comes at a cost, which is somewhat reduced efficiency. If you want maximum performance from a dipole-type antenna with a slight reduction in convenience, put up

a full-size dipole (80 or 40m halfwave) and feed it with ladder line and your Johnson

Matchbox. It can be made to work on ALL bands from 80 through 10.

Vic K2VCO

Date: Mon, 6 Apr 98 09:59:45 -0000

From: "Len W. Tough" <len@infinet.com>

To: <qrp-1@Lehigh.EDU>

Subject: [7634] S. Cal QRP / Society Link???

Message-ID: <199804061501.LAA18683@mail1.infinet.com>

Mime-Version: 1.0

Content-Type: text/plain; charset="US-ASCII"

Sorry about the bandwidth:

I received a message from an op from the S. Cal QRP Society requesting a link to CQrp web site.

Message has been erased.

Please re-send

73:

Len Tough

len@infinet.com

=====

STATION W8VO, COLUMBUS, OHIO - ALL DIGITAL, ALL THE TIME

Enjoy! de AB7HI, Stephen Lee, Federal Way, WA
slee@u.washington.edu

Date: Mon, 6 Apr 1998 11:28:06 EDT
From: K5BDZ <K5BDZ@aol.com>
To: K5BDZ@aol.com, qrp-1@Lehigh.EDU
Subject: [7636] Coax as twin lead??
Message-ID: <c2571946.3528f488@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

For those of you wondering, yes you can use coax as twin lead. I suggest you use it wisely, as in coming thru your attic around the various non'RF metal such as pipes, house wiring, A/C ducts, etc. rather than as the entire feedline from the antenna. However it will work as the entire feedline, too, but with limited parameters.

How to make it? Use two pieces of same length coax (any type, any impedance) solder the shields together at the top and bottom. DO NOT solder shield to center conductors! Use both coax center conductors as your twin feedline. GROUND ONLY the shield at the bottom, and ground it to your antenna tuner. Connect center conductors to antenna at top, and bottom to balanced wire feeders of your antenna tuner (remember to use shorting wire from LW to BAL on most of your tuners!)

Impedence? Calculate by doubling the impedance of your coax, i.e. 52 ohm coax gives you 104 ohm "ladder line". I use discarded RG62 (from computer installations, etc.) which is 93 ohm coax, thus giving me an approximate 186 ohm shielded ladder line. - Yes, I'm cheeeep...half the fun of antenna experimenting!

In all fairness, althought it does work well in all my applications, I suggest using this sparingly in situations where it is best to shield your feedline against surrounding objects (including speaker wires, and in underground feedline runs, etc. as well as above noted other metallic objects)

For those of you who expouse theory without practical application to back it up, save your fingernails and keyboard plastic trying to tell me, "You can't do that! It won't work." I was told that by numerous ham friends, who later, upon using the antennas with coax feedlines, came back to me and asked, "How'd you do it?"

To paraphrase an old advertising slogan, "Try it. You'll like it!"
Bill, K5BDZ

Date: Mon, 06 Apr 1998 09:02:13 -0700
From: Bill Todd <bill@willapabay.org>
To: nwq-1@scn.org
Cc: qrp-1@Lehigh.EDU
Subject: [7637] Next Sat NW QRP Club Meeting
Message-ID: <1.5.4.32.19980406160213.00714adc@willapabay.org>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hello group -

For those of you in the Puget Sound area, next Saturday is your chance to see what other NW QRPers are really like! That's right, it is our regular Club meeting at good old Andy's Diner on 4th Ave. in Seattle.

Expect To:

Meet other QRPers,
Share your latest kit or project,
Impress your friends,
Meet the girl (or man) of your dreams,
Make money in multi-level marketing (oops, scratch that..ha ha)

Anyway, the meeting is at 10 AM at Andy's Diner and all Club members and visitors are welcome to attend. Be sure to enter through the back door, as the front door does not open for business until 11 AM.

CU there - Bill-N7MFB
<http://www.willapabay.com/~bill>
ICQ me at #8926298

Date: Mon, 06 Apr 1998 11:20:25 -0500
From: "George T. Baker" <w5yr@swbell.net>
To: Dale Pendleton <ad4yh@nortel.ca>
Cc: cw@qth.net
Subject: [7638] Re: [CW] Tasmania and others DX's with QRP and QRPP(long?)
Message-ID: <352900C9.3F85A876@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dale Pendleton wrote:

>
> Just remember guys, the REAL heros in working qrp are the guys on the
> OTHER end that are digging those weak - wimpy qrp signals out of the
> noise...
>
> AD4YH

Dale, I used to share your views and inherently disliked QRP operation since I felt that it unfairly burdened the "other" operator. To me, 100 watts was barefoot and grasping at straws. If the lights didn't dim a little on heavy dahs, something was wrong.

But, then, I did a rare thing: I set aside my preconceived notions and actually spent several hours over several days/evenings LISTENING to cw QRP signals and qsos. I also started reading the QRP newsgroups and lists on the Net.

I was amazed to find that most QRP signals are little if any weaker than the average 40 or 20 meter cw signal. Sure, there are the big guns running "the legal limit+" that pin your meter. But, I quickly saw that compared to the typical 100-watt transceiver and wire antenna crowd, the QRP stations were negligibly weaker and not particularly harder to copy.

I frequently copy QRP stations a thousand miles away that are 20 db over S9. Average runs around S5 to S9 with usually solid copy. And there are some speed demons in the milliwatt crowd, so don't just look for 5 wpm QSOs! QRP does not equate to NEW OP.

My conversion came about when I hobbled my IC-765 down to 5 watts output and started working some dx! An example: heard ZK1DI on 40 cw in a pileup. Called him twice with 5 watts into the EDZ antenna. He came back to and worked a W6, and then he called me! Got the usual "contest" 599 report, but the important thing is that he heard my 5-watt signal in the pileup well enough to remember it and then call me. I seriously doubt that he would have done that if he felt that he was "digging those weak-wimpy signals out of the noise."

Another: had a solid 15-minute qso the other evening with a KH6 (sure, big dx, but distance is distance). He was running 3 watts to a bobtail and I was running five watts to the EDZ.

I could brag further about dx contacts, but you get the idea. This stuff happens all the time and is typical, not exceptional.

I won't even dwell on the notion that RFI/TVI is almost unheard of with 5 watts or less in the antenna. Or that you can actually build radios again from excellent kits that rival the ICOM/YAESU/KENWOOD products in performance and features, but not price.

You don't need a special radio; almost any rig can be reduced in output power to 5 watts or less. Applying a d-c voltage to the ALC input from a battery/pot arrangement will do the trick if the front-panel control is limited.

So, tune around some, Dale, and see how the "other half" is living and enjoying ham radio - again. Listen around 7.04, 10.106 and 14.06 mHz. Yes, you will occasionally hear a really weak signal. But, chances are that the guy is running 100 milliwatts or less!

After almost 53 years in this game, things for me were getting a little routine and boring. But, I soon learned that QRP operation can make ham radio once again a challenging and interesting activity.

Come join us!

--

72/73, George

Amateur Radio W5YR (since 1946)

QRP-L #1373 QRP ARCI #9583

AutoPOWER Systems, Fairview, TX (30 Mi. N. of Dallas)

Date: Mon, 06 Apr 1998 11:34:32

From: Steven Weber <kd1jv@moose.ncia.net>

To: qrp-l@Lehigh.EDU

Subject: [7639] Re: My circuits never seem to work for some reason...

Message-ID: <3.0.3.16.19980406113432.2c1f2402@mailhost.ncia.net>

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

>I still cannot figure it out.

>

Welcome to the world of analog electronics, where all is not as it seems....

I think your problem has been pretty well addressed, but I will comment that the emitter resistor is typically a little smaller, 100 to 470 ohms. To a large extent, the emitter resistor is for thermal stability and a smaller value will help maximise the voltage swing you can get on the output. Also, as others noted, the emitter needs to be by-passed to get effective AC gain.

Now, I was thinking the same thing last night, why doesn't this blasted !!@\$\$\$### circuit not work the way it should!!! I was trying to get the transmit portion on my 15 meter 3904 rig to work.

First thing I found was my band pass filter would not peak at 21 Mhz. I was using 10.7 Mhz IF transformers, back to back with the tuning cap removed. Turns out they were self resonant at about 16 Mhz, which happens to be the LO/BFO frequency. So, I pulled some coils from a CB set, from the Tx section, and was able to peak them nicely at 21 Mhz.

Then I found the buffer/driver wasn't very stable. Would break into oscillation at the slightest provocation. Connecting the collector to a tap on the coil, a few turns up from the cold side, solved that problem.

Finally, a nice clean 21 Mhz signal with 10 mw of output! Time to get the

PA to work, a piece of cake right? No, not at all. Kept blowing the base-emittor junction of 2N2222's. Generally, in nanoseconds. About half a dozen of them. Getting pretty frustrated about now. Finally, I put in a 2N3866 and wha-la, power out! A little tweaking and getting 500 mw out.

I don't know what was wrong with the 2N2222's I was pulling out of that old modum, but seems they have very weak base-emittor junctions.

Okay, the transmittor now works and it only took about 8 hours to figure out all its problems. Now, why did the receiver part quit working? ARRRG!

72,

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Mon, 06 Apr 1998 11:34:56 -0500
From: "edwin a. crowell" <w5twr@rconnect.com>
To: G0BPS@kanga.demon.co.uk
Cc: qrp-l@Lehigh.EDU
Subject: [7640] Re: Bullet Hole?
Message-ID: <3.0.32.19980406113336.0109bf7c@rconnect.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

hi dick, perhaps after writing the book his meter was shot! 72, ed

At 04:35 PM 4/5/98 +0100, you wrote:

>In message <003a01bd6096\$adb4a560\$36a8a3cc@SG2939M.webaccess.net>, Steve
>Galchutt <n0tu@webaccess.net> writes
>>Hey Paul ,
>>Your "Data Book for Homebrewers and Qrpers" was laying on my bench when
>>notice the bullet hole in the meter face on the Simpson VOM (back cover
>>photo). Was the meter in error or something?
>>72...Steve
>
>
>Obviously something about the meter upset him,
>Perhaps it wasn't accurate anymore
>
>Or perhaps he drank too much and was 'shot away' !!
>
>8-)
>

>TTFN de ..
>--
>Dick Pascoe G0BPS
>Kanga Products
>Seaview House, Crete Road East
>Folkestone CT18 7EG U.K.
>Tel 44 (0) 1303 891106
><http://www.kanga.demon.co.uk>
>
>

Date: Mon, 6 Apr 1998 09:43:38 -0700
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: <qrp-1@Lehigh.EDU>
Subject: [7641] ARCI Survey
Message-ID: <01bd617b\$263f5b80\$630a0d0a@doug.dpol.k12.ca.us>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I visited with Ron Stark this weekend while in Reno. And yes, he does have an impressive antenna system. It is 85 feet up, and even though he offered to let me climb the tower, I declined. While there, Ron gave me a copy of the Spring issue of QQ, and it is a "big" issue, 88 pages in fact.

Inside the issue is a survey and Ron and I discussed this at length. I have been hounding Ron and the ARCI BoD for the past year to send QQ out as first class postage so the readers get it in a timely manner. Ron told me that I am the only one who has ever complained to him that QQ does not come first class mail. Before NorCal went to first class mail with QRPP, I got requests every week for first class delivery, and would say that many of the readers wanted it. Ron disagrees, and says that first class mail delivery is not important. So, if you would like to receive your copy of QQ via first class mail, send Monte an email stating so, (I have his permission to do this). His address is:

ku7y@dri.edu

It will be interesting to see what the results are. If no one else cares about getting their copy of QQ via first class mail, then I will be quiet about it. This is the beauty of the internet. It is simple to get feedback. Thanks for the bandwidth. 72, Doug, KI6DS/M0BIV

Date: Mon, 06 Apr 1998 17:44:45 +0100
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7642] 10 Meter DX
Message-ID: <3529067D.3A22@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Worked Cesar/LU3HIP on 10 Meters yesterday. 2-Way QRP at 5 watts each. Used my 40 Meter Dipole at 30 Feet, east/west beam on 40 Meters, more North/South on 10 meters.

Argentina. First ever 10 Meter QSO for me, and QRP to boot!

My folded bazooka is going to a fellow Ham who wanted it so I will spend this week using the old 40 Meter dipole fed with 300 Ohm line.

I'm hoping you all will help me in gathering signal reports this week. I'm usually on the air from 0130Z to 0430Z each nite (XYL permitting, of course).

The plan is to convert the dipole to a 'Folded Dipole' next Saturday and gather further information for comparing the three antennas.

I.E. ==> With 300 Ohm balanced feedline, what performance is obtained on 40/20/15/10 meters with the following antennas:

- * Folded Bazooka/300 Ohm input at fundamental.
 - ** Test completed: Phenomenal! Good at odd harmonics.
- * Dipole/75 Ohm input at fundamental.
 - ** Tested before and retesting now.
- * Folded Dipole/300 Ohm input at fundamental.

Oh, and responding late to a previous thread, I use stranded copper wire with outer cover intact. Just be sure to measure velocity factor, cut accordingly and check for resonance if building resonant ant.

Boy, those higher HF bands were really hopping yesterday.

-Ed

--

72, Ed, WE6W/qrp CW ONLY; Proud Member: QRP-L/ARCI/Norcal/ARS/AR
<http://www.qsl.net/we6w> (Enjoying Ham Radio every day.)

Date: Mon, 06 Apr 1998 11:44:41 -0500
From: "George T. Baker" <w5yr@SWBell.net>
To: K5BDZ@aol.com
Cc: Low Power Amateur Radio Discussion <qrpl@Lehigh.EDU>
Subject: [7643] Re: Coax as twin lead??
Message-ID: <35290679.F7BD9E3B@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

It works fine, Bill. No argument from me or the several authors that have published this approach.

BUT, there is no need to select any particular coax for its impedance value if the line is to be operated non-terminated with a tuner. The biggest worry is power/voltage rating so that the potential (no pun!) high voltages that can appear on a non-terminated line don't arc through the coax insulation from center conductor to shield. Of course, most of us QRP-types don't need to worry about that!

I recommend running one of the T-Line programs (see Hamcalc, for example) to see what the maximum line voltage will be under a given operating setup and then choose coax that is adequately rated with a little safety factor included.

Thanks for reminding me of a very useful approach.

--
72/73, George
Amateur Radio W5YR (since 1946)
QRP-L #1373 QRP ARCI #9583
AutoPOWER Systems, Fairview, TX (30 Mi. N. of Dallas)

K5BDZ wrote:

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> do that! It won't work." I was told that by numerous ham friends, who later,
> upon using the antennas with coax feedlines, came back to me and asked, "How'd
> you do it?"
>
> To paraphrase an old advertising slogan, "Try it. You'll like it!"
> Bill, K5BDZ

Date: Mon, 6 Apr 1998 12:58:00 -0400
From: Andris Neimers <VitalVoice@compuserve.com>
To: QRP-L reflector <qrp-l@Lehigh.EDU>
Subject: [7644] Coax as twinlead -2
Message-ID: <199804061258_MC2-3918-64CF@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain; charset=ISO-8859-1
Content-Disposition: inline

Bill is of course correct that you can use parallel runs of coax as
balanced line but it seems to be a lot of effort unless it is for specifi=
c
reasons... For your consideration I would make the following observations=
having some experience with doing this... 1. The best use of this techniq=
ue

is to use a "parallel coax sandwich" in situations where you really need the isolation/shielding it provides.. In my case I "built" some 104 ohm coax twinlead to feed from my 40 metre delta loop balun to the 30 metre delta loop hung inside the 40 metre loop. The same balun then serves both=

loops... The reason of course being that both loops have a natural impedance of around 100 to 110 ohms... 2. In cases where an ordinary coax=

run will work - use coax, and then at the loop or antenna, plug into the appropriate balun... 3. If you build parallel coax runs, then also remember

to physically link the two runs of coax - I used chunks of shrink tubing = at

2-foot intervals and that works nicely... 4. Main point - building such "custom" balanced line is usually more work than its worth if ordinary coax/balun combinations will work... 5. Bill is of course right about the=

cautions on only linking the outer braid to ground..

73! Andy/VE7FJT
Bowen Isl., B.C.

Date: Mon, 06 Apr 1998 12:08:13
From: Roger Braker <msebrakr@telepath.com>
To: qrp-1@Lehigh.EDU
Subject: [7645] update: please help
Message-ID: <3.0.1.16.19980406120813.0d1f7aee@telepath.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Guys,

I did it! MY ugly weekender works!! The joy almost equaled my first contact back in the fall of 97! I talked to Tim, km5om from Joshua TX this morning at about 16:00 UTM. I looked him up on QRZ and he did not appear to have an e-mail. I was using my 1.5 watts into the same trap dipole. I think he gave me an RST of 322. I'm not sure because his CW was not all that great. I'm not complaining.. it may be my poor copy skills too?? I think my antenna is to blame for my problems because he mentioned a lot of QSB and that I had a pretty weak signal but he was very strong with no QSB.

My antenna is probably not radiating quite right. I think I am going to try a dedicated 40 meter dipole, a loop, a verticle or a long wire. I'll probably try the long wire first as an experiment. Input on the antenna would be welcome. I'll keep you posted.... Boy, what a learning process this has been:-)

73,
Arnold kd5ckh

Date: Mon, 06 Apr 1998 13:22:53 -0400
From: Michael Maiorana <mikemo@ibm.net>
To: qrp1 <qrp-1@Lehigh.EDU>
Subject: [7646] Elmer 101: getting started
Message-ID: <35290F6D.57BA@ibm.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dale Scott wrote:

>
> Many of us will be receiving our SW 40+ kits any day now and will be
> understandably anxious to start flowing the solder. As "students" are we to
> put these together in their entirety or are we supposed to go slow and put them
> together one module at a time so we can discuss this as a group. If we are
> supposed to go slow you'd best tell us or there might be one or two "impatient"
> folks in the crowd (I know at least one) who will put the whole darn thing
> together the first night.

Ok folks, I guess now is the time....

I heard from Dave and he is most of the way through the kit assembly and shipping. I think it's safe to say that all should be received by the end of this week. I don't want to get going too fast until everyone gets their kit.

Chuck Adams has done a ton of work putting together a build sequence that should work well. Power supply first, VFO, Receiver, etc. I will post the details tomorrow.

Glen has put together a great index of all the components of the SW-40+ receiver and their function. The list is posted on my web site at <http://www.qsl.net/kf4trd> .

I'm sure that a ton of questions are going to be presented during the class. The whole idea of this is to "ask and learn". I do want to try to keep the repeat information to a minimum, so, if you have a question or problem please CHECK OUT THE WEB SITE and read the FAQ. It will develop as the class progresses and the questions get asked. If you have any suggestions as to how to better present the FAQ information please email

me directly.

Also, for all those who want to help and answer questions, please read all the way through your mail before you answer to make sure it wasn't already answered. This will prevent multiple answers to the same question.

Let's also remember that we are all learning, and if you don't like answering simple questions or if you can't be bothered with "neubie questions" then please set your mail to filter any elmer101 emails and you won't have to bother. We have already seen condescending remarks and replies to questions. All this does is make the other person feel bad about themselves. If you can't answer nice, don't answer!

If you have a question, check the website. If you don't find the answer, ASK!!! Remember there is no such thing as a stupid question (except "do you want some more money?" or "would you like to work this weekend?" ;-)

Get your soldering stuff together, finish up those chapters and get ready to learn. Remember, bring your own brain, they will not be provided ;-)

Thanks to all those who are participating

--

72 de ku4qo (New advanced call!)
Mike Maiorana
Palm Harbor, FL

"And if I have prophetic powers, and understand all mysteries
and all knowledge, and if I have all faith, so as to remove
mountains, but have not love, I am nothing"

Date: Mon, 6 Apr 1998 10:22:08 -0700 (PDT)
From: KC5TJA <kc5tja@topaz.axisinternet.com>
To: qrp-l@Lehigh.EDU
Subject: [7647] Re: ARCI Survey
Message-ID: <Pine.LNX.3.96.980406102107.8699A-100000@topaz.axisinternet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Speaking of ARCI, when is the QQ going to be mailed? I still haven't received my copy yet. Don't worry, though; I'm patient. :) I have another three months to receive the next QQ.. :D

```
=====
KC5TJA/6      |      -| TEAM DOLPHIN |-
DM13          |      Samuel A. Falvo II
QRP-L #1447   |      Chief Architect and Project Founder
=====
```

Date: Mon, 6 Apr 1998 12:42:31 -0500
From: <FaithD@mail01.dnr.state.wi.us>
To: <qrp-l@Lehigh.EDU>
Subject: [7648] Re: K2 Pictures
Message-ID: <c=US%a=_%p=State-of-Wiscons%l=MAIL04-980406174231Z-58550@mail01.dnr.state.wi.us>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Speaking of SGC. They were at the AES Superfest this weekend (in Milwaukee, WI) and they had working demo's of the SGC-2020 there. They look like a nice rig but the availability was still 'real soon now' (but not yet) and overheard that any orders placed now probably won't be filled until later this Summer.

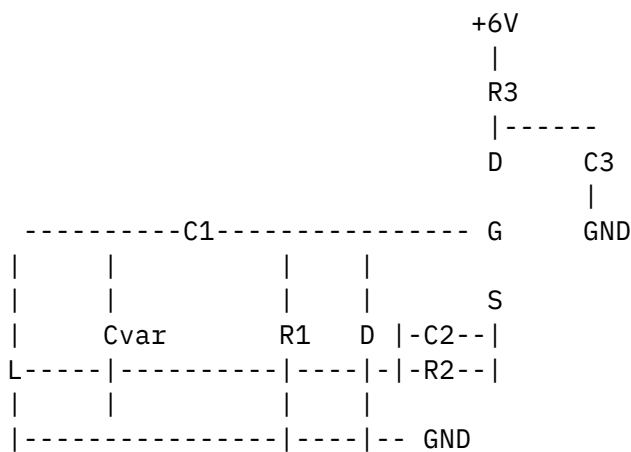
After seeing the unit and them asking if I'd like one, I explained that I would be waiting for the K2 to come out before making any decision. Though perhaps they were playing dumb, the individual I spoke to didn't appear to have even heard of the K2. I was 'that close' to ordering one last November but elected to wait (fortunately).

N9WR, Don C. Faith III

Date: Mon, 6 Apr 1998 16:39:29 +0100
From: Leon Heller <leon@lfheller.demon.co.uk>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7649] Hartley oscillator
Message-ID: <OqHHsEAxcPK1EwPe@lfheller.demon.co.uk>
MIME-Version: 1.0

I see from his recent posting that Samuel, KC5TJA, is still having problems with his 7 MHz VFO generating a distorted waveform. Some time ago I did quite a lot of experimenting with a Hartley oscillator, and came up with the following circuit after finding that none of the published circuits worked properly with the FETs that I tried - they

always produced highly distorted output.



C1 = 5 pF
C2 = .01 uF
C3 = .01 uF
R1 = 100 K
R2 = 1.8 K (adjust depending on FET characteristics)
R3 = 100 R
FET = BF244
D = 1N4148 (cathode to GND)
L = ~ 1 uH tapped 1/4 from GND.

With a 310 pF variable for Cvar, this osc. has a range from about 4.5 MHz to 21 MHz. The output (taken from a link on L) is a visually pure sine wave (0.44 V to 0.38 V p-p).

At the operating frequency, XC1 should be about 10K, and XL about 200 R.

Leon

--

Leon Heller: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See <http://www.lfheller.demon.co.uk/dds.htm> for details of my AD9850
DDS system. See " /diy_dsp.htm for a simple DIY DSP ADSP-2104 system.

Date: Mon, 6 Apr 1998 10:53:43 -0700 (PDT)
From: KC5TJA <kc5tja@topaz.axisinternet.com>
To: Leon Heller <leon@lfheller.demon.co.uk>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7650] Re: My circuits never seem to work for some reason...

Message-ID: <Pine.LNX.3.96.980406104716.9951B-100000@topaz.axisinternet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

> bypass cap., the gain was about 9. I didn't have a 2N3904 model, so I used the
> generic small transistor model, with beta = 100.

2N3904 is listed in my references as a generic transistor. :) beta=100,
and Ft=300MHz at 10-20mA of Ic.

> The analysis confirms that the DC conditions aren't too far out, with the
> collector voltage (node 3) at 7.6 V. One usually tries to get it at 1/2 the
> supply voltage, for minimum distortion with large signals.

7.6V?! That seems a bit too high. It should have been 6.06V at the
output with the values cited. Strange. (I measured 5.9V on my circuit.)

> I used full Berkeley SPICE, which is available from the Simtel archive (look
> for DSPICE). The educational version of PSPICE can also be found there. It's
> easier to use, but is limited to a fairly small number of nodes. A book on
> SPICE is essential, it's a large, complex program with *lots* of options and
> tricks of the trade. I use Computer-Aided Circuit Analysis using SPICE, by
> Walter Banzhaf, published by Prentice-Hall.

Is DSPICE distributed in source code form, so that I can compile it under
Linux? Or is there a Linux (preferably X/Windows) version already
available? I do not use Windows for an operating system.

> Using simulation tools like SPICE can save a lot of time, and is *very*
> educational. It only takes a few minutes to change a component value, and you
> can see the effect straight away. It won't design your circuits for you, but
> will help you to get them working first time. Of course, I don't practise what
> I preach, this is the first time I've used it seriously.

Hehehe. :D

The last three times I can remember compiling Spice for my system, every
time it compiled perfectly, but crashed as soon as it started to run.
Dunno why either, as all the code is 100% ANSI C compliant.

> .ac lin 50 1meg 10meg

I'm not familiar with the .ac command. I can surmise that the 1meg and
10meg are the frequency ranges. What is the "lin" and "50" parameters
though?

=====
KC5TJA/6 | -| TEAM DOLPHIN |-

DM13 |
QRP-L #1447 |

Samuel A. Falvo II
Chief Architect and Project Founder

Date: Mon, 6 Apr 1998 11:04:32 -0700 (PDT)
From: Monte Stark <ku7y@dri.edu>
To: QRP-L <qrp-l@Lehigh.EDU>
Subject: [7651] QRP ARCI Survey
Message-ID: <Pine.SOL.3.96.980406105652.8936B-100000@vortex>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi All,

The full survey will be posted to QRP-L asap. Please read it and send me your thoughts.

This survey is for ALL QRP ARCI members, active or in-active. Be sure to include your membership number with your response. This will be seen only by me and I will be keeping only the information from the survey, not who it comes from.

If you are not a member of the QRP ARCI (and why not?) :-), feel free to respond also. Let me know what we need to do to get you to join. I will keep a separate list of items from non members.

For those who are in-active, what do we need to do to get you back to active status again?

Thanks to QRP-L for the B/W.

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Mon, 6 Apr 1998 12:05:21 -0600
From: "Marshall Emm" <mgemm@mtechnologies.com>
To: qrp-l@Lehigh.EDU, cqc@mtechnologies.com
Subject: [7652] Ten-Tec 1254

Message-ID: <199804061806.MAA25017@edison.chisp.net>

MIME-Version: 1.0

Content-type: text/plain; charset=US-ASCII

Content-transfer-encoding: 7BIT

I've expanded my mini-review of the Ten-Tec Model 1254 General Coverage Receiver Kit, and put it on the web site at:

<http://www.mtechnologies.com/tt1254/1254.htm>

You'll find some pix, including a shielding mod which seems to help with the display multiplexing noise problem.

73

Marshall Emm

N1FN/VK5FN

n1fn@mtechnologies.com

Milestone Technologies

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(303)752-3382

--

Date: Mon, 6 Apr 1998 11:10:56 -0700 (PDT)

From: Monte Stark <ku7y@dri.edu>

To: KC5TJA <kc5tja@topaz.axisinternet.com>

Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [7653] Re: ARCI Survey

Message-ID: <Pine.SOL.3.96.980406110807.8936D-100000@vortex>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

On Mon, 6 Apr 1998, KC5TJA wrote:

> Speaking of ARCI, when is the QQ going to be mailed?

The April issue was mailed on either the 27th of March or the 30th of March, in Canton, Ohio.

cul,

73, Ron, SOWP 5545M,

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
....ku7y@sage.dri.edu.....Washoe Lake, Nevada.....
....QRP-L #17...ARS #49...NorCal #330.....NRA LIFE.....

Date: Mon, 6 Apr 1998 12:21:09 -0600
From: David Ek <ekdave@earthlink.net>
To: "'qrp-l@lehigh.edu'" <qrp-l@Lehigh.EDU>
Subject: [7654] Re: Diode Rating Help--tnx
Message-ID: <01BD6156.7C24A520.ekdave@earthlink.net>

All -

My diode question has been answered. Thanks to those who replied.

73,

Dave AB0GO

Date: Mon, 6 Apr 1998 11:04:46 -0700 (PDT)
From: KC5TJA <kc5tja@topaz.axisinternet.com>
To: Leon Heller <leon@lfheller.demon.co.uk>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7655] Re: Hartley oscillator
Message-ID: <Pine.LNX.3.96.980406105521.11391A-1000000@topaz.axisinternet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Mon, 6 Apr 1998, Leon Heller wrote:

> I see from his recent posting that Samuel, KC5TJA, is still having
> problems with his 7 MHz VFO generating a distorted waveform. Some time
> ago I did quite a lot of experimenting with a Hartley oscillator, and
> came up with the following circuit after finding that none of the
> published circuits worked properly with the FETs that I tried - they
> always produced highly distorted output.

Thanks for the circuit description. However, I haven't any FETs, and for some reason or other, FETs are much more expensive where I am than bipolars. Hence my decision to stick with bipolars. :) Besides, I still have about 40 NPNs and 60 PNPs left to go...

Anyway, I just wanted to let you know that I'm trying to rebuild my VFO from a simple one-transistor, one knight stand jobber to a separate box, with an external tuning knob (even have an air-variable on order from Dan's!), and will have two BNC outputs, one 180-degrees out of phase from the other. The output waveform will be as close to a 50% duty-cycle square wave as possible, and will have a 5V peak voltage, fully TTL compatible.

Why TTL?

Well, based on my research in the magazines and such, it seems that mixers work best when driven with "high"-voltage, 180-degree signals, especially square waves. Indeed, it seems as if most mixers are DESIGNED for this specifically.

Besides, it's also handy to have a 6MHz to 8MHz source of square waves present when working with digital electronics too... :-)

THAT is the reason that I am trying to build that amplifier. The goal is to have a VFO tunable from 6 to 8MHz, buffered and amplified enough to drive a 74HCT74 D flip-flop, which will produce the 5V outputs I seek.

I don't know what the output impedance of those CMOS TTL chips are, but if necessary, I will use an emitter follower on each of the outputs to drop the impedance as necessary, while still maintaining the 5V (or thereabouts) output.

I'm not looking for super sharp rise times, or anything like that. I do, however, want a general purpose device that can double as my ham rig's VFO and as a square wave source for my digital electronics projects (like home-built processors... :D).

Comments? Suggestions? :)

```
=====
      KC5TJA/6      |      -| TEAM DOLPHIN |-
      DM13          |      Samuel A. Falvo II
      QRP-L #1447   |      Chief Architect and Project Founder
=====
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Date: Mon, 6 Apr 1998 12:24:22 -0600
From: "James R. Duffey" <jr3m@maxwell.com>
To: qrp-l@Lehigh.EDU
Cc: Vic Rosenthal <rakefet@rakefet.com>

Subject: [7656] B&W Folded Dipole; Noise and Efficiency
Message-ID: <v03007801b14e9786a5c2@[192.31.66.158]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Vic - You asked;

"Is a folded dipole any quieter than an ordinary dipole? If so, why?"

Well the answer is, "it depends". The sentence that you quote from B&W is, at least to me, gobbledy gook. I think that one can make the same argument about the RF field, in which case it is clearly a disadvantage.

None the less, folded dipoles, and loops, and any antenna that has continuity from one terminal to ground can be quieter than a dipole or end wire that does not have continuity to ground. If an antenna does not have continuity to ground the antenna can become charged when it rains, snows, or blows hard. If not grounded it will then discharge through the front end of your receiver which, if slow, will sound like a periodic popping, and, if fast, can sound much like white noise.

Loops and folded dipoles have a DC path from one terminal to the other so if one terminal is grounded, as it usually is, then the antenna can discharge through ground and not the front end of your receiver, thereby reducing noise.

You don't need much continuity to reduce this problem on a dipole, a 50 kOhm resistor across the feedpoint will do fine, as will a voltage balun which seems to be out of vogue these days.

As for the other posts that the B&W antenna won't work. I can never resist a comment on this. It does work, and is fairly broadbanded. As to whether it is as broad band as B&W advertises, that is another question, but for 80 M to 10 M operation it has reasonable, mostly <3:1, SWRs. But... The resistor which provides the broad banding also dissipates some power. That is the compromise you pay for broad banding. You get low SWR over a large portion of the spectrum, and you give up some of your radiated power.

John Belrose, VE2CV, did some tests a few years ago of potential broadband antennas for spread spectrum use by the Canadian government and showed the B&W antenna to be about 50-60% efficient at the worse spots in the spectrum, and slightly higher at other portions of the spectrum. Now 60% efficient is down a little over 2 dB. Is this the best place, or reason to give up power?

Can the broadbanding be done for less power loss?

We generally look for good operation over the Ham bands, and not the entire

spectrum. With that in mind, there are several alternatives; a flat top dipole fed with tuned feeders leaps to mind. The price to pay here is matching convenience, although that can be done easily with an automatic tuner or Cecil's "tunerless" feedline technique. I am not sure of exact costs, but I would guess that a homebrew half wave for 80M (or even a 100ft flattop), fed with ladder line and an LDG autotuner is not much more expensive than the B&W antenna. Parallel dipoles are a possibility, as are Gary Breed's closely coupled resonators. Loop antennas work well at all harmonics of the fundamental.

That said, 2 dB is probably not a lot to give up for casual operating and is difficult for most amateurs to measure. I suspect that there are a lot of antenna systems out there that have 2 dB of loss between losses in feedline absorption, feedline radiation, tuners, poor grounds for verticals, and baluns. Most of their owners are probably satisfied with their performance. After all, the "standard S unit" is said to be 6 dB, and 1 dB is generally recognized to be the minimum difference in signal level the human ear and attached signal processing unit can handle. You will notice the difference in weak signal work, though. I would not want to use the B&W for satellite work on 10 M as an example.

My opinion is that QRP often tends to be weak signal work, and it doesn't seem to make a lot of sense to throw away 2 dB right off the bat, particularly given the fact that much of the operation is done with single band rigs where the gain in the compromise made, multibanding, has limited usefulness.

If you are wondering how the B&W antenna works; think of the antenna as a transmission line terminated in a resistor. The resistor tends to absorb whatever EM wave makes it to the resistor after being radiated in the antenna. Worst case is half the wave, hence worst case efficiency is 50%. If you want to make one yourself you can get 3 watt noninductive resistors from Digikey. The termination resistance is about 900 Ohms. (No I don't know where they get that number) You can put whatever number of resistors in series/parallel to get the right overall resistance. For QRP, one should work, but use 2 for conservative engineering.

I am not going to say it doesn't work, but I am going to say I think there are better antennas for most QRPers to use. - Duffey KK6MC/5

James R. Duffey KK6MC/5 DM65 <jamesd1@flash.net>
30 Casa Loma Road
Cedar Crest NM 87008

Date: Mon, 6 Apr 1998 11:20:16 -0700 (PDT)
From: KC5TJA <kc5tja@topaz.axisinternet.com>
To: Monte Stark <ku7y@dri.edu>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7657] Re: ARCI Survey
Message-ID: <Pine.LNX.3.96.980406111846.11391D-1000000@topaz.axisinternet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Mon, 6 Apr 1998, Monte Stark wrote:

> On Mon, 6 Apr 1998, KC5TJA wrote:
>
> > Speaking of ARCI, when is the QQ going to be mailed?
>
> The April issue was mailed on either the 27th of March or the
> 30th of March, in Canton, Ohio.

OK, so it just hasn't arrived yet. Like I said; no hurry. I just didn't know when it was actually going to be mailed. :)

88 pages? Gads, that's bigger than the last issue I received when I first signed up, and that was pretty thick for so "few" writers. Am I correct in understanding that QQ has no space constraints that are imposing on authors?

```
=====
      KC5TJA/6      |      -| TEAM DOLPHIN |-
      DM13          |      Samuel A. Falvo II
      QRP-L #1447   |      Chief Architect and Project Founder
```

Date: Mon, 06 Apr 1998 13:32:16 -0500
From: John Burnley <JBurnley@ifmc.org>
To: qrp-l@Lehigh.EDU
Subject: [7658] Iowa QRP 1st meeting and other tidbits
Message-ID: <s528d96b.046@ifmc.org>
Mime-Version: 1.0
Content-Type: text/plain
Content-Disposition: inline

Well we did it! The first meeting of the Iowa QRP group (name

yet to be determined) was held last Saturday at the public library in Urbandale, IA. Six members were present and a variety of topics were discussed. Several goodies were brought for show and tell. On display was an NW80/20 (Dan's version), PIXIE II, TIXIE, Ten-Tec 6 meter converter, and an uncased 38s. The group will have an Email newsletter (frequency has yet to be officially decided). The group will also have a weekly net on 40 meters (7.110 Mhz) at 4:30pm CDT (21:30 UTC). This is one enthusiastic group!

Last night I got a really big treat on 30 meters. After working an HP1 with 4 watts to a vertical, I got my first across the pond QRP contact. I snagged an I2 with a 339. Nothing exotic, but to me it was great! This QRP stuff is a blast! Right before I worked the I2, I heard an N0TFI/QRP work him from CO. I think the call belongs to Jess, a member of this list. BTW, you were 339 with me! If I got the call mixed up, I apologize to all in advance.

72/73,
John NU0V
Urbandale, IA

Date: Mon, 6 Apr 1998 11:50:06 -0700
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: <qrp-1@Lehigh.EDU>
Subject: [7659] Alinco mini-handie talkie mod URL
Message-ID: <01bd618c\$d1ded7c0\$630a0d0a@doug.dpol.k12.ca.us>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Last Friday I posted to the list information on the Antenna mod to the little Alinco handie talkies that are available for \$88 at some dealers. Some have reported problems with the url. I think that I have figured out what your problem is. Here is the url:

<http://hamradio.mail1.com/alinco>

Note that you must type mail and then the number 1, not maill. I tried the url today and it works fine. Good luck and sorry for the confusion. 72,
Doug, KI6DS

Date: Mon, 06 Apr 1998 12:03:22 -0700
From: Monte Stark <ku7y@dri.edu>
To: kc5tja@topaz.axisinternet.com, qrp-1 <qrp-1@Lehigh.EDU>
Subject: [7660] Re: ARCI Survey and QQ
Message-ID: <352926FA.ECCC00DD@dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

>
> 88 pages? Gads, that's bigger than the last issue I received when I first
> signed up, and that was pretty thick for so "few" writers. Am I correct
> in understanding that QQ has no space constraints that are imposing on
> authors?

Hi,

We will not be doing 88 pages each issue! But there was just so many good things this time that I did it. But it's a sure fire way to spend more money!

No, we don't give any maximum number of pages/words. Some things need more room to be said than others!

If something is too big, I'll run it in parts.

Sometimes things are run just the way we get them. Sometimes they are edited. Maybe a little, maybe a lot!

I don't like hard, firm rules. Given enough time, they ALWAYS backfire.

The two goals are still the same as when I took over:

- 1) Get it out on time.
- 2) Make it worth reading when it gets there.

Spelling, grammar, layout and etc. all come after that. With all of us working for a living and this just being done "on the side" by a bunch of volunteers, it's sometimes a wonder we get it out at all!! :-)

This speaks very well for the whole crew, who do 90% of the work. I just get to make the noise!

Thanks,

Ron, KU7Y

Date: Mon, 6 Apr 1998 15:31:54 -0500 (EST)
From: "James C. Owen, III" <owen@piper.eeel.nist.gov>
To: tentec@contesting.com, qrp-1@Lehigh.EDU
Subject: [7661] Argosy Info needed
Message-ID: <55916.owen@piper.eeel.nist.gov>

Need a copy of the model 225 power supply manual for the Argosy or just the schemetic would be a help.
Likewise I need the schemetic of the option 1126 for the Argosy. This is the linear amplifier switching kit. I would also take the kit if someone has it available. 73 Jim K4CGY

Date: Mon, 6 Apr 1998 15:57:40 EDT
From: K5BDZ <K5BDZ@aol.com>
To: w5yr@swbell.net
Cc: qrp-1@Lehigh.EDU
Subject: [7662] Re: Coax as twin lead??
Message-ID: <ac39de77.352933b7@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

Thanks George

Glad to hear it coming from someone else. Have used this dual coax feed in various antennas for over 25 years...successfully. You're right about the main consideration being the voltage carrying capabilities of the coax being the primary consideration.

I know very well where Fairfield is. Go thru there each driving trip to Dallas. Used to know some hams who moved there. Great little town.
Bill, K5BDZ

Date: Mon, 06 Apr 1998 14:59:52 -0500
From: "George T. Baker" <w5yr@swbell.net>
To: qrp-l@Lehigh.EDU
Subject: [7663] Icom IC-765 Power Level Control (long)
Message-ID: <35293438.DB5D357E@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Some of us who use the IC-765 for QRP have been exchanging notes about how to set up the rig for QRP power levels. I recently became dissatisfied with the lashup I was using and set about to improve it. In the process, I gathered some data that might be of interest to others.

I originally used the ALC voltage control scheme for the 765 developed by Icom and dated 6/1/94. Briefly, this approach uses a 9-volt battery with the (-) terminal connected through a switch and a series 47K resistor to one end of a 20K pot to common. The (+) terminal of the battery goes to common and to the shield of a cable to the ALC jack on the back of the rig. The center conductor of the cable goes from the pot arm to an RCA plug into the ALC connector. The pot is adjusted for the desired output power, in the range of from zero to about 100 watts.

While this circuit works well enough, it is critical to adjust since power levels within the 0+ to 5 watt QRP range are contained within only a few degrees of knob rotation. My goal was to construct a similar circuit that would provide some "bandspread" in adjustment such that the QRP range occupied a larger portion of the pot rotation.

My final circuit is similar to the Icom except that the series resistor is changed from 47K to 39K; the pot is replaced with a 10K unit with an audio taper and an attached switch; and a 20K series resistor is placed between the "high side" of the pot and common. The pot arm again goes to the ALC input through a shielded cable and RCA plug. The "low side" of the pot is connected to the 20K resistor to common. Circuit simulation to reproduce the measurements showed that the 765 ALC circuit input appears as a equivalent 21K resistor at dc.

All these parts go into a little Radio Shack plastic box (270-1802, for example). The pot is RS 271-215. If you are looking for some fun, ask the Radio Shack guy/gal what "audio taper" means on the pot, and if you can use it for other than audio applications. "We've got answers!"

{For you non-oldtimers, the "high side" of a pot is the lug on the right when the pot is held with the shaft facing you and the lugs are at the bottom. The lug on the left is the "low side," and the center lug is the

moveable arm. These archaic terms come from the old radio days when pots were primarily used for volume controls in receivers. The previous stage output was connected to the high side, the low side was connected to ground and the movable arm (center lug) was the output to the next stage. This convention gives minimum volume for full counter-clockwise position of the knob and increasing volume as the knob is turned clockwise. (They may do it the other way in England or in the southern hemisphere where other pots are observed to run backwards).}

This pot orientation is selected such that when the switch is operated with clockwise rotation, the circuit applies an ALC voltage which decreases with clockwise rotation. Thus, output power increases with CW rotation of the knob as God intended. The switch is wired in series with the negative battery terminal and one end of the 39K resistor. It could probably be omitted since the predicted current drain is in the order of 150 microamps.

These values differ only slightly in total resistance from the Icom circuit: now 69K instead of 67K. However, the pot rotation is now limited to a smaller overall voltage range which, combined with the audio taper of the pot rotation vs resistance, gives the desired bandspread operation. The QRP range now extends from roughly 7 o'clock to 1 o'clock of knob position, power increasing smoothly and uniformly with CW rotation.

The major problem I ran into in setting up this circuit and resistance values was the relationship between ALC voltage and output power. For example, one correspondent reported that 5 watts output was secured from his 765 with the front-panel control set at 12 o'clock for 50 watts output and his ALC voltage set to -2.69 volts. On my 765, an ALC voltage of -2.69 volts reduced the power to zero at any setting of the panel knob.

I obtained the following set of ALC voltages vs power output. Conditions were full normal power output of 120 watts on 7.04 MHz, key-down into a shielded dummy antenna. (I was tempted to call CQ a few times at 5 watts to see if Chuck or Doc were listening, but figured they would be working!) Caution: since my data differs from others, there may be differences from one 765 to another, so treat all this as relative data that works for me. ALC voltage was taken with a Beckman 2020 DMM; power output was taken from an MFJ 989-C tuner meter on the low range.

ALC Voltage	Power Output	Notes
-----	-----	-----
Switch off	120 watts	Normal QRO operation
-2.222 vdc	0	Pot switch on and
knob	at about 7 0'clock	
-2.193	0+	Power

meter just moves

		off zero
-2.083	5	Knob at 1 o'clock
-2.055	10	
-2.025	20	
-1.996	40	
-1.976	60	
-1.953	80	
-1.935	100	
-1.864	120	Maximum output
-1.650	120	Knob full CW at 5 o'clock

Keep in mind that the pot rotation is logarithmic with respect to resistance so that the large voltage change toward the CW end of rotation (high side) does not equate to a large knob setting change.

In addition to the caveat that your 765 may differ from mine, I need to apologize for not having a more accurate power meter, especially in the 0 to 5-watt range. But, you use what you have. When the spirit moves again, I will fire up the Tektronix and take voltage readings across a known resistance and provide those power readings if anyone is interested.

However, what I have now works well and is much more convenient to use. I can set at least approximate-QRP power levels from near zero to five watts, and even though I don't know the exact output, I have a convenient rotation range which seems to give a smooth uniform change in power level vs knob rotation.

If you pursue this approach to QRP level setting, you might want to consider using a 50K linear pot for the 39K resistor and a 25K linear pot for the 20K resistor. With these pots wired as rheostats, you can place the power output vs knob rotation range to suit your rig.

One final note: the 765 (like most rigs) shows an ALC spec of 0 to -4 volts for ALC operation. This suggests that many rigs may have similar ALC voltage requirements for various power levels. So, you might want to experiment with your non-765 rig and see how well this anti-QRO box works.

Thanks for the time and bandwidth - which should be a constant. As LB says, I hope this information is interesting and useful to someone.

--

72/73, George
Amateur Radio W5YR (since 1946)

QRP-L #1373 QRP ARCI #9583
AutoPOWER Systems, Fairview, TX (30 Mi. N. of Dallas)

Date: Mon, 06 Apr 1998 15:57:55 EDT
From: ka7you@juno.com
To: mikemo@ibm.net
Cc: QRP-L@Lehigh.EDU
Subject: [7664] Re: Elmer 101: getting started
Message-ID: <19980406.120920.9639.3.KA7YOU@juno.com>

Mike,

I'm sending this to the group, as I've heard similar questions among correspondence with others.

I'm wondering how long the individual sections of this project are going to be available on line.

I will be traveling fairly extensively (Illinois, Indiana and Colorado) this spring and summer, and don't know if I will have the capability to keep up with the project. I won't have much time to spend 'on-line' accessing a web site, and I'm not even sure I will have the capability to capture all of the correspondence on the QRP-L listserver. I even missed the announcement that 'The soup was on' among all the chatter about the 'beta' testing, and only found it when discussions turned to posting about shipping dates. I have ordered the kit anyway, but may not be able to complete it in a reasonable time frame.

Do you or any of the other Elmers have any idea what kind of a time commitment might be required, and how long this project might be planned to run.

I realize there will be discussion and modifications continuing for many months, but I'm just interested in the actual course time frame as planned or envisioned.

Thanks,

Rod Johnson KA7YOU from CN97ak near Issaquah, Wa. 160M thru 1296 MHz (3456MHz still in the wings)

You don't need to buy Internet access to use free Internet e-mail.
Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Mon, 06 Apr 1998 16:14:08 -0400

From: Michael Maiorana <mikemo@ibm.net>
To: ka7you@juno.com
Cc: QRP-L@Lehigh.EDU
Subject: [7665] Re: Elmer 101: getting started
Message-ID: <35293790.3B7C@ibm.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

ka7you@juno.com wrote:

> I'm wondering how long the individual sections of this project are
> going to be available on line.
> I will be traveling fairly extensively (Illinois, Indiana and
> Colorado) this spring and summer, and don't know if I will have the
> capability to keep up with the project. I won't have much time to spend
> 'on-line' accessing a web site, and I'm not even sure I will have the
> capability to capture all of the correspondence on the QRP-L listserver.

Everything will be archived on a web site. I don't have any plans on
tearing down the site. It will remain up until qsl.net goes away ;-)

Everyone is encouraged to work at their own pace. If it takes you a
year, you will be able to get the info.

--

72 de ku4qo
Mike Maiorana
Palm Harbor, FL

"And if I have prophetic powers, and understand all mysteries
and all knowledge, and if I have all faith, so as to remove
mountains, but have not love, I am nothing"

Date: Mon, 06 Apr 1998 15:18:27 -0500
From: "George T. Baker" <w5yr@swbell.net>
To: VitalVoice@compuserve.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7666] Re: Coax as twinlead -2
Message-ID: <35293893.F1F6DB0D@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Andy, just one comment:

I agree that mechanically fastening the two coax runs together is convenient, but as your fellow countryman, Jack Belrose, has pointed out it is not required for electrical operation. The field associated with each coax is confined within that coax and is independent of the location of the other coax, etc.

--

72/73, George

Amateur Radio W5YR (since 1946)

QRP-L #1373 QRP ARCI #9583

AutoPOWER Systems, Fairview, TX (30 Mi. N. of Dallas)

Andris Neimers wrote:

>
> Bill is of course correct that you can use parallel runs of coax as
> balanced line but it seems to be a lot of effort unless it is for specific
> reasons... For your consideration I would make the following observations
> having some experience with doing this... 1. The best use of this technique
> is to use a "parallel coax sandwich" in situations where you really need
> the isolation/shielding it provides.. In my case I "built" some 104 ohm
> coax twinlead to feed from my 40 metre delta loop balun to the 30 metre
> delta loop hung inside the 40 metre loop. The same balun then serves both
> loops... The reason of course being that both loops have a natural
> impedance of around 100 to 110 ohms... 2. In cases where an ordinary coax
> run will work - use coax, and then at the loop or antenna, plug into the
> appropriate balun... 3. If you build parallel coax runs, then also remember
> to physically link the two runs of coax - I used chunks of shrink tubing at
> 2-foot intervals and that works nicely... 4. Main point - building such
> "custom" balanced line is usually more work than its worth if ordinary
> coax/balun combinations will work... 5. Bill is of course right about the
> cautions on only linking the outer braid to ground..

>
>
>

73! Andy/VE7FJT
Bowen Isl., B.C.

Date: Mon, 6 Apr 1998 21:34:06 +0100

From: Leon Heller <leon@lfheller.demon.co.uk>

To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [7667] Hartley oscillator SPICE model

Message-ID: <iwUAbDA+wTK1EwL0@lfheller.demon.co.uk>

MIME-Version: 1.0

Further to my previous posting about a Hartley oscillator, I've had a go at a SPICE simulation of a very basic Hartley circuit, without a

bypassed source resistor or a gate diode. The model is as follows:

OSC.CIR - SIMPLE HARTLEY OSCILLATOR

```
VCC      4      0      6
L1       0      2      2.5E-7
L2       2      1      7.5E-7
KL1-L2      L1  L2      1.00
C1       1      0      100P
C2       1      3      5P
R1       3      0      100K
JFET1    4      3      2      EASY
```

```
.MODEL  EASY    NJF
.TRAN 100N 100000N 10000N UIC
.WIDTH OUT = 72
.OPTIONS LIMPTS = 1000 ITL5 = 20000
.PLOT   TRAN V(1) (0,6)
.END
```

I used a generic JFET model.

I devised my own technique for modelling the tapped coil using two coils in series, with mutual inductance between them. I don't know if this is the best way to do it, but it seems to work. I tried the technique out first on a model of a conventional 1:4 broadband RF autotransformer.

I assumed a coupling coefficient of 1.00 between the coils, which are effectively a single winding tapped at 1/4 the way up from ground. It's probably quite close to 1.0.

Distortion is very apparent in the output plot, as I found when I actually built this circuit some time ago.

If anyone else is interested in this prototyping approach, could they please get in touch. I vaguely remember someone using SPICE to model their 2N2222 radio circuits.

73, Leon

--

Leon Heller: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See <http://www.lfheller.demon.co.uk/dds.htm> for details of my AD9850
DDS system. See " /diy_dsp.htm for a simple DIY DSP ADSP-2104 system.

Date: Mon, 06 Apr 1998 16:44:57 -0400
From: joel malman <malman@world.std.com>
To: qrp-l@Lehigh.EDU
Cc: malman@world.std.com, mikemo@ibm.net
Subject: [7668] Elmer 101
Message-ID: <199804062044.AA08921@world.std.com>

Folks,

Just got my SW (Elmer 101) kit in the mail today. WOW! It looks GREAT!
I have never build a NN1G kit before, so some quick comments:

1. The board is double-sided, silk-screened and all holes are plated through. Very very nice.
2. The manual looks super. A lot of intro stuff (soldering, color codes, winding toroids, etc). Parts list. Theory of operation. Changes from the old version of the SW kit. Schematics, board layout, etc. It looks really wonderful!
3. Parts. Looks like Dave has top quality parts! All have long leads. The IC and transistors are in a static shielded bag. I can see that Dave is into the baggie school (a baggie within a baggie) for parts storage.

Oh boy, I can hardly wait to start building.

Dave has a "Recommended Assembly sequence" (starting on page 11). So maybe the Elmer 101 Class should follow his suggestions.

72 and good building!

/joel wa1qvm (Concord, Mass)

Date: Mon, 6 Apr 1998 17:04:38 -0400 (EDT)
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
To: K5BDZ <K5BDZ@aol.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7669] Re: Antennas, non-res
Message-ID: <Pine.GS0.3.96.980406164639.7745B-1000000@larry>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

> John, WB5IIR

John was a gold mine of exceptionally practical wisdom on antennas.

> I have build many
 > various lengths of NON resonate antennas over the years, and all worked.

Actually, most of the antennas we use are non-resonant except at one specific frequency. Resonance means simple 0 reactance at the feedpoint. If your dipole resonant at 7.05 MHz will work at 7.15 MHz, then any wire of any length presenting any impedance ($R \pm jX$) will work. Some are a bit more difficult than others to get an impedance at the ATU terminals which falls within the range of the components in the ATU relative to the transformation to 50 Ohms resistive.

The 90-110' length mentioned in the note referenced here is about standard G5RV length (roughly $3/2 \lambda$ on 20, which is almost resonant on 30 meters) is about that rule-of-thumb $3/8 \lambda$ minimum on 80 to avoid matching problems and get some decent efficiency. (The $3/8 \lambda$ rule-of-thumb applies to unloaded--no loading coils--horizontal single wires.)

So if you have more than 67' (40 m dipole) length and less than 135' (80 m dipole length), try the 90-110' length you do have. Parallel feedline--since this is ATU territory. An old Matchbox is one of the best commercial link tuners ever made--though it can have its input circuit improved for easier (less sharp) matching. Unfortunately, I have not heard anything more on the potential for a commercial outfit making a link tuner--but will check around at Dayton. In the meantime for QRP, the Z-Match or a home brew link is best. I saw the B&W antenna page on the web, and coil stock from them starts out at \$50 a chunk and goes up for the big stuff, and there is a \$100 charge for them setting up their coil machine. So if you see coil stock for sale at hamfests, stock up if the price is right, and almost any price is better than special ordering from B&W.

Remember that antenna season is also ATU experimentation season as well.

-73-

LB, W4RNL

L. B. Cebik, W4RNL	/\	/\	*	/	/	/	(Off)	(423)	974-7215
1434 High Mesa Drive	/	\	\	----	/	----	(Hm)	(423)	938-6335
Knoxville, Tennessee	/\	\	\	/	/		(FAX)	(423)	974-3509
37938-4443 USA	/	\	\						cebik@utk.edu
QRP/ARCI 2572	G-QRP	7203	CQC	125	NEQRP	347	NORCAL	1111	MIQRP 1432
NWQRP 401	ARRL Life: Technical & Educational Advisor							10-10	41159
QCWA 13211	scQRP	28	AK/QRP	343	CW Ops QRP Club	(VK)	476	FISTS	2600
http://funnelweb.utcc.utk.edu/~cebik/radio.html									

Date: Mon, 6 Apr 1998 17:14:28 EDT
From: DENNIS MO <DENNISMO@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [7670] Golf Ball Antenna?
Message-ID: <6601e978.352945b6@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: quoted-printable

Does anyone know anything about a Golf Ball antenna? A friend was working a=0A fellow out somewhere in the Pacific and the guy reported that he was running=0A his power into a Golf Ball antenna. Now my buddy was copy this guy at abt 20=0A WPM - a little faster than he is comfortable copying but he is very confident=0A that he copied this part of the QSO correctly. =
Any ideas or information out=0A there?

Tnx

73's es 72's de Denny / KF6NJQ

Denny / KF6NJQ (Soon to be AD6_ _ or Vanity call)
FISTS # 4570 / QRP-L # 1359
10-X # 69158
PROMISE KEEPER

HAMing It Up Everyday In Goleta, CA

Section: Santa Barbara
Long: 34.437 N At: 119,868 W=A0=A0=A0
Grid: DM04BK
WEB PAGE: <http://member.aol.com/dennismo>

Date: Mon, 06 Apr 1998 14:25:27 -0700
From: Bob Bayha <rbayha@ix.netcom.com>
To: QRP-L <qrp-1@Lehigh.EDU>
Subject: [7671] Elmer 101: Kit arrival in CA
Message-ID: <35294847.EF712AD2@ix.netcom.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Just thought some might want to know.... the Kit arrived in the S.F. Bay Area today. Can't wait to get started.... be patient, be patient, be patient!!!

Bob, K6RKB

Date: Mon, 6 Apr 1998 17:49:16 EDT
From: DENNIS MO <DENNISMO@aol.com>
To: qrp-l@Lehigh.EDU
Subject: [7672] Thoughtful Appreciation
Message-ID: <c257d77a.35294dde@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: quoted-printable

Hi Gang -

I've been a member of this list now for about 4 or 5 months and I certainly=0Ahave benefited from the experience and wisdom from so many of you. =0AI was a=0ATech +, as of last August 26th, when I joined up. I really believe that the=0Ainfo and help that I've received, directly and indirectly=0A, has made me a=0Abetter radio operator. I especially appreciated the encouragement to upgrade=0Ato all of us that were on the way up the ladder.=

I wish that I could say that=0Aparticipation in the Fox Hunts really helped me but I can't. My work hours=0Akept me out of the hunts but I've heard many say how much it did help them. I=0Awish I could have hunted, too. But my lack of Hunts didn't stop me from=0Awanting to upgrade. On Feb 28th I passed my General Class exam and code test;=0Aon March 14th I passed my Advanced Class exam; and on April 4th I took my=0AExtra exam and=0A20 WPM test and passed them, too! I'll be watching the Web for=0Amy new=0Acallsign and I'll post it here for your information.

So, I just want to thank everyone again for their help and for keeping the=0Afires going under me!

73's es 72's de Denny / KF6NJQ /AE

Denny / KF6NJQ (Soon to be AD6_ _)
FISTS # 4570 / QRP-L # 1359
10-X # 69158
PROMISE KEEPER

HAMing It Up Everyday In Goleta, CA

Section: Santa Barbara

Long: 34.437 N Lat: 119.868 W=A0=A0=A0

Grid: DM04BK

WEB PAGE: <http://member.aol.com/dennismo>

Date: Mon, 6 Apr 1998 17:51:47 -0400 (EDT)
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
To: "James R. Duffey" <jr3m@maxwell.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [7673] Re: B&W Folded Dipole; Noise and Efficiency
Message-ID: <Pine.GS0.3.96.980406173619.7745E-100000@larry>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Duffey's analysis of the B&W antenna is in very close agreement to some modeling I have done. And his suggestions for alternatives are very good.

As much as I like (and have used at numerous QTHs) doublets (or off-center-feds or end-feds), many folks are convinced that their local situations demand the use of coax. A quite good scheme involving only antenna wire and some light CPVC spacers is the multi-band fan dipole, with the ends of each higher band dipole drooped from 1-3' lower than the next lower band. I like to avoid 3rd harmonic operation--either by omitting 15 in the array with 40 meters or by including it and getting the 40 and 15 interacting. Hence, I tend to recommend two antenna-sets: 80/40/20/10 and 30/17/15/12. If you have just a few favorite bands, make up your own combination. Tune up the dipoles to resonance (lowest SWR) starting from the shortest wire and proceeding to the longest, since there will be some interaction. It does pay to make sure that the lowest band used has the strongest wire, since this one will anchor the rest from its ends. It weighs a bit more than the commercial all-banders, but it is cheap and effective. Like all multi-band antennas, it radiates anything spurious to which the unused portions present a low impedance.

I like a choke-balun (ferrite or otherwise) at the feedpoint, just as with any other coax-fed dipole. The higher, the better. High value resistor across the feedpoint for charge drainage.

If you use 4 bands with max physical separation of the ends, you might run a poly (UV resistant) code from the lowest end over to the post/tree/mast/tower/etc. holding the antenna end to make sure that thunderstorm does not flip the hanging part over the top part.

If cheap prevails, and all-bands are your aim, this might do until more money comes along. It's an old idea, but one worth remembering.

-73-

LB, W4RNL

Date: Mon, 6 Apr 1998 15:14:01 -0600
From: Brad Mugleston <bmug@gwl.com>
To: "'qrp-l'" <qrp-l@Lehigh.EDU>
Subject: [7674] Elmer101
Message-ID: <01BD616E.A20E87C0@pps-pc10.gwl.com>

Question, I subscribe to this list via the Digest mode. Is there a way we could set up a separate sub list that only forwards the Elmer101 articles?

The way I see it work is I would subscribe to QRP-l-Elmer and anything posted to the qrp-l with the subject Elmer101 would automatically get reposted to the QRP-L-Elmer list and I would get it NOW (and in the digest that night). That way I could set up an Elmer folder and have all the great Elmer articles in one spot and not have to sift through the digest for the Elmer stuff.

Just an idea that would help a lot.

Thanks

de KB0ROL, Brad

Date: Mon, 6 Apr 1998 15:18:39 -0600
From: Brad Mugleston <bmug@gwl.com>
To: "'qrp-l'" <qrp-l@Lehigh.EDU>
Subject: [7675] Not quite QRP but please read
Message-ID: <01BD616F.479BD120@pps-pc10.gwl.com>

This post isn't quite QRP but if I can get a solution to my problem I would

have more time (and money) to play radio so here goes.

I need to do a mail merge with Access and Word to the Fax machine. I want each letter to be individualized to my clients (about 2,200). It costs about 13 cents a minute for long distance fax (4 to 10 pages depending on phone lines) verses 32 cents postage plus envelop plus paper for mail and it takes a lot longer.

I have not been able to find any fax software that can be feed a fax number on the fly they all want you to pick (live) from a list for faxing later.

This would work fine if I wanted to send the same thing to everyone but I need to customize the letters.

Anyone out there see such a critter?

Thanks

de KBØROL, Brad

Date: Mon, 6 Apr 1998 16:31:45 -0600
From: "James R. Duffey" <ji3m@maxwell.com>
To: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [7676] Parallel Dipoles as Multiband Antennas
Message-ID: <v03007802b14f0653b280@[192.31.66.158]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

L. B. - Thanks for the kind words;

"And his suggestions for alternatives are very good."

I have a bit to add to your comments;

" I like to avoid 3rd harminc operation--either by omitting 15 in the array with 40 meters or by including it and getting the 40 and 15 interacting."

Two other suggestions here; One is to add the capacitance hats at the end of the 15 M half wave points to lower the "third harmonic" frequency into the band (the Antenna Handbook has info on this), the second is to use, on 15M only, a closely coupled resonator the latest Antenna Compendium has a pattern of this antenna.

" Tune up the dipoles to resonance (lowest SWR) starting from the shortest wire and proceeding to the longest, since there will be some interaction."

This is good advice, but don't go back and try to touch an acceptable SWR into a better one. In this case better is the enemy of good enough. I have had good luck with the 80/40/20/10 versions as they are all harmonically related and interact only a bit and had more problems with the WARC versions. They all worked after a fashion. A 40/20/10 is pretty easy to get going and offers 15M if you have a rig with a wide enough tuning range.

James R. Duffey KK6MC/5 DM65 <jamesd1@flash.net>
30 Casa Loma Road
Cedar Crest NM 87008

Date: Mon, 6 Apr 1998 17:28:03 -0500
From: ac5ez@webtv.net (Larry B)
To: qrp-l@Lehigh.EDU
Subject: [7677] help
Message-ID: <199804062228.PAA21842@mailtod-121.bryant.webtv.net>
Content-Type: TEXT/PLAIN; CHARSET=US-ASCII
Content-Transfer-Encoding: 7BIT
MIME-Version: 1.0 (WebTV)

Need qsl route etc for GM3KHH, any help appreciated
larry ac5ez

Date: Mon, 6 Apr 1998 22:22:28 +0100
From: pmk@juno.com (Patrick M Kvitkauskas)
To: qrp-l@Lehigh.EDU
Subject: [7678] RF probe success with Micronta 22-195A
Message-ID: <19980406.222527.8790.0.pmk@juno.com>

I missed out on the RF probe thread as I always use a oscilloscope for tweaking up the rigs here in the shack. After building the Sierra I decided to go ahead and build a RF probe. I figured it would come in handy out in the field rather than dragging the Oscope with me.

Just finished building the RF probe for my Micronta 22-195A
Ended up with a 2.2meg resistor instead of a 4.7 as recommended.

Think I need to get another meter as the load is higher than anticipated after ending up with the 2.2meg resistor.

I thought it turned out pretty cool though as I used a old business gold or anodized plated ball point pen on the outside and painted black. It had a inner liner that had the works that twisted the pen in and out . The metal liner had the plastic works in it so I drilled it out and used it as a insulator. I used a piece of #14 solid copper with heat shrink tubing and drilled out the end as the hole was not quite big enough. Soldered the metal liner to the ground, Drilled out the back for the coax exit then put the pen together and soldered the 2 pieces together. I used a old broken scope probe for the coax and the BNC connector.

I am going to take a few snapshots to those that might be interested.

It worked FB across the 3.5 to 21 mhz and calibrated it at the 10Vrms range and used the trusty Tektronics 453 Oscope with 10X probe and had 28Vpp (2.8Vpp with 10X) to go by. Hope I went about it the rite way but like I said seems to work FB. Did a few lower measurements down in the 100mv range and that looks pretty good as well.

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Get completely free e-mail from Juno at <http://www.juno.com>
Or call Juno at (800) 654-JUNO [654-5866]

Date: Mon, 6 Apr 1998 18:52:55 -0400
From: "Ron Polityka" <wb3aal@talon.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [7679] Problem
Message-ID: <01bd61ae\$bd0b9aa0\$1a5445c6@default>

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Is anyone else having the same problem as I am with
repeat messages?

73, Good DXing & QRPing
Ron de WB3AAL

E-mail: wb3aal@talon.net
BBS: WB3AAL @ WB3FYL.#BER.PA.USA.NA

EPA QRP # 1 QRP # 5318 10-10 # 13173
QRP-L # 1099 G-QRP # 3031 AK QRP # 309
Adventure Radio Society #380

Date: Mon, 6 Apr 1998 22:48:54 +0100
From: pmk@juno.com (Patrick M Kvitkauskas)
To: qrp-l@Lehigh.EDU
Subject: [7680] ooops RF probe success with Micronta 22-195A
Message-ID: <19980406.225127.3166.2.pmk@juno.com>

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for tweaking up the rigs here in the shack. After building the Sierra
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Sorry Someone hit the send button har on the first round.

Think I will build one for a friend next as it will really come in handy for him.

72/73 de Patrick KD40BQ

AR

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Or call Juno at (800) 654-JUNO [654-5866]

End of QRP-L Digest 1052

